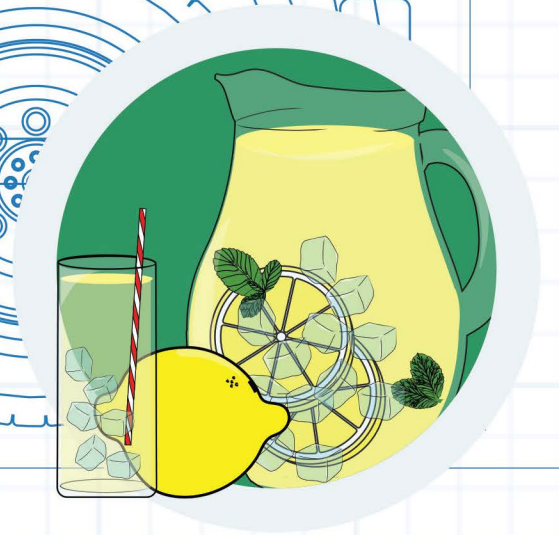
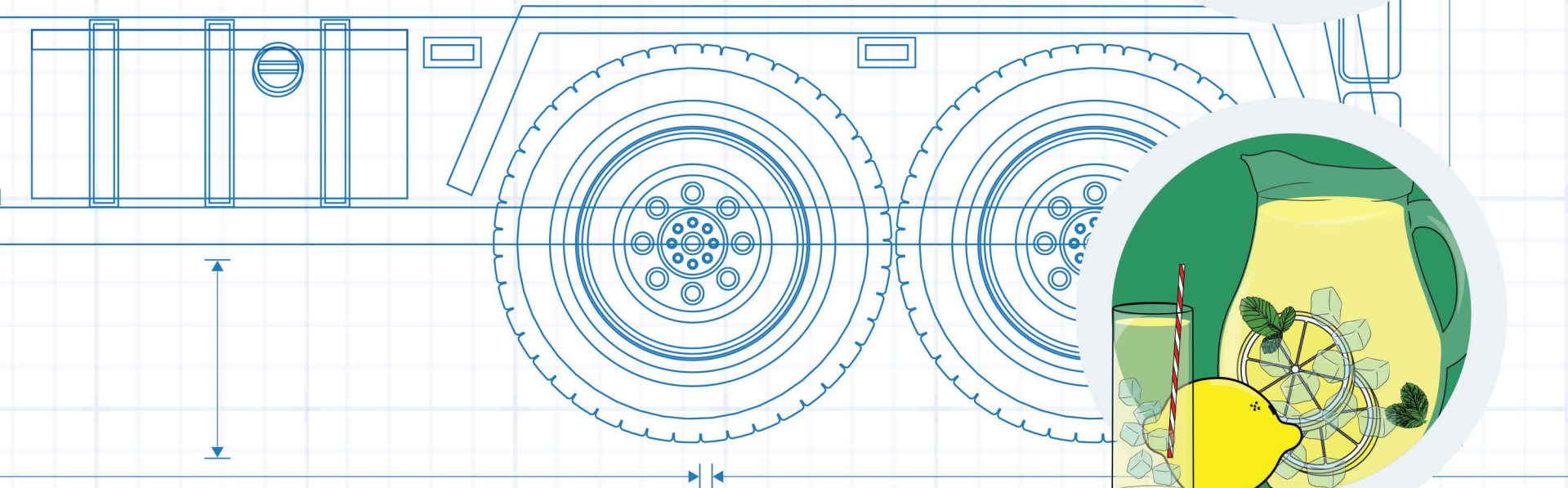
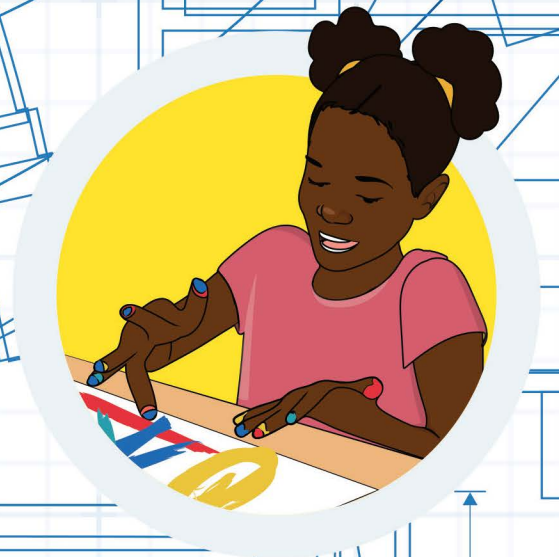
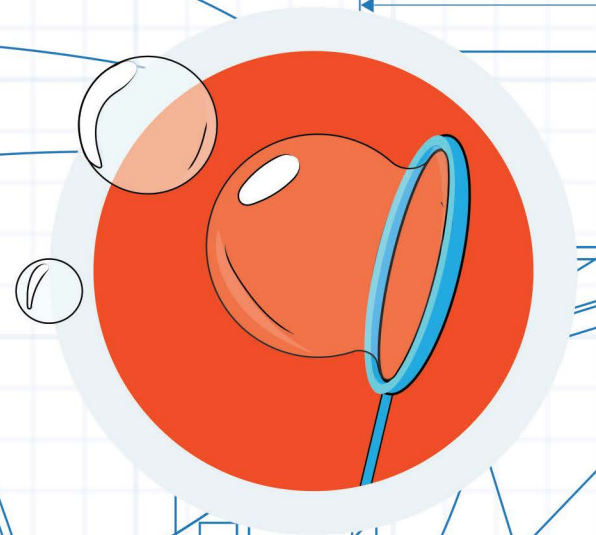
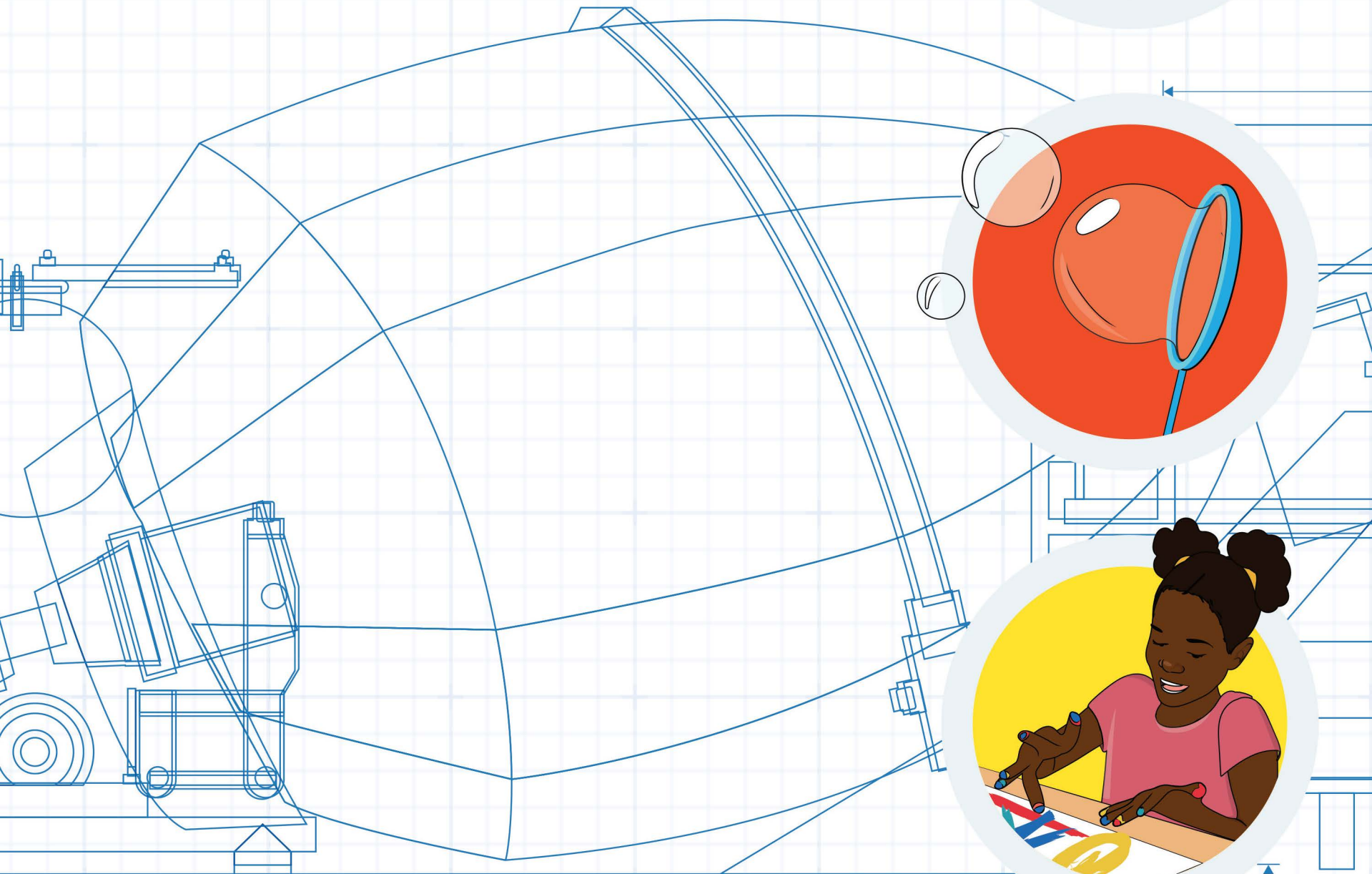
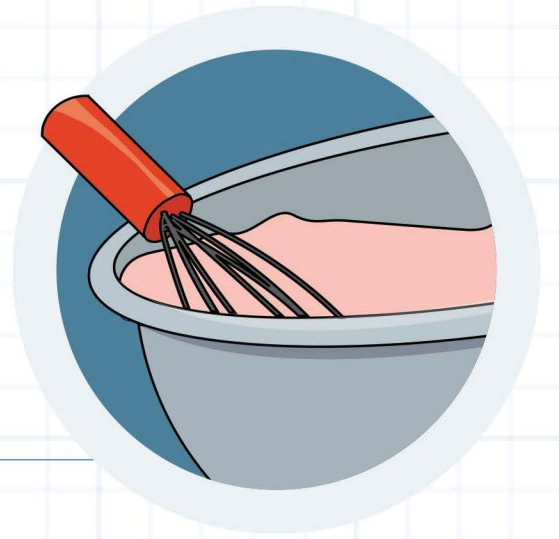


BLUEPRINT

Mix & Make Teaching Guide 6





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BLUEPRINT



Mix & Make

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Digital Online Resources



<https://clibblueprint.org/resources-tx>

At the web address above you will find the following resources to help your instruction.

- ASL Signs (images & videos)
- Family Resources
- Featured Class Books
- Letter and Numeral Formation Guide
- Letter Pronunciations (audio)
- Mindful Moments
- Science Journals
- Songs, Poems and Chants (audio & print)
- Teaching Point Checklist
- Unit 6 Images
- Weekly Materials List
- Yoga Poses (images & video)

Icon Legend



Keep it Going



Words We Are Learning



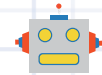
Remember...



Song Within the Lesson



Multilingual Learner Support



STEM



Family Engagement



Downloads Available



Tip

Disclaimer

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Mix & Make

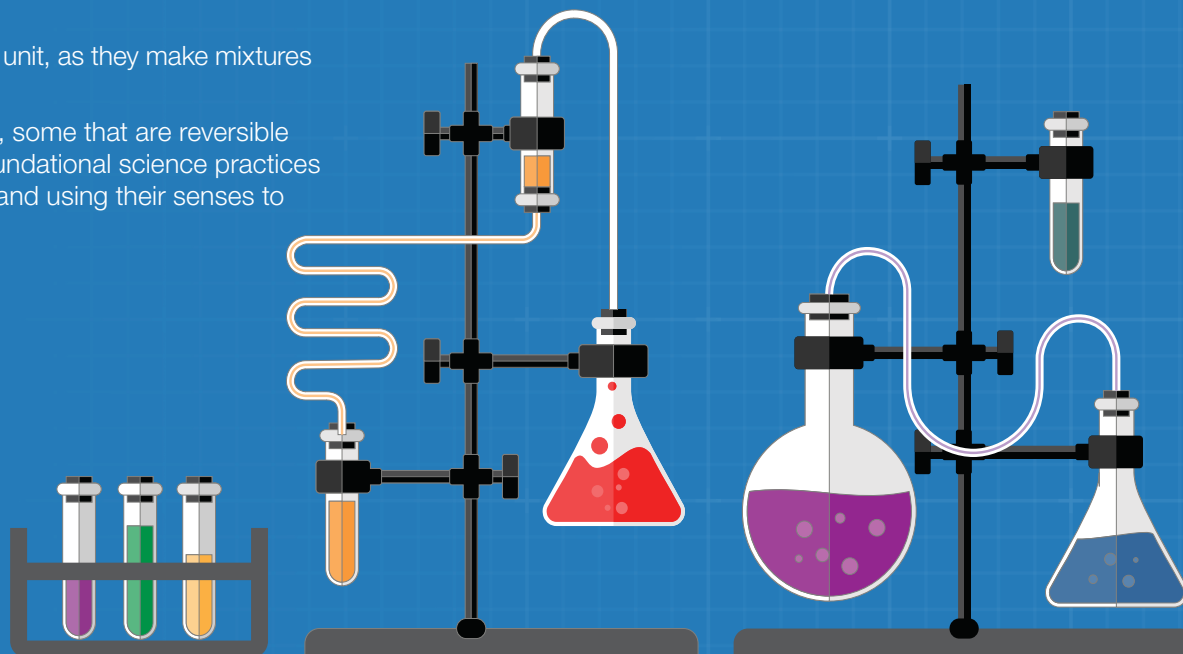
What happens when you mix things together?

What Children Learn

When you mix things together, they can change into something new. Sometimes you can separate them; sometimes you can't.

Children channel their inner scientist in this unit, as they make mixtures using a variety of substances.

They learn that mixtures result in changes, some that are reversible and some that are not. They engage in foundational science practices by asking questions, making predictions, and using their senses to make observations.



Week	Guiding Question	What Children Learn	Be Sure To...
1	What is mixing?	When you mix, you combine two or more things together. You need to observe closely to learn more about your mixtures.	<ul style="list-style-type: none">• Get children thinking about mixing and mixtures.• Give children opportunities to mix water and common powders (salt, sugar, cornstarch, etc.).• Ask children to make predictions and observations.• Introduce tally marks.
2	How can we mix and make bubbles?	Bubbles can be made from different mixtures. Bubbles float and come in different sizes.	<ul style="list-style-type: none">• Give children opportunities to observe bubbles and make bubble mixtures.• Review initial sounds and teach the <i>letter u</i> and the <i>letter x</i>.• Continue to review tally marks.
3	How can we make and mix colors?	Mixing colors changes them. They can get lighter or darker or change altogether.	<ul style="list-style-type: none">• Offer children multiple opportunities and materials to mix colors and observe how they change.• Ask children to make associations between colors and objects and/or colors and feelings.• Teach the <i>letters i</i> and <i>c</i>.
4	How can we make and mix lemonade?	Lemonade can be made using many different ingredients. The taste will change depending on what you use.	<ul style="list-style-type: none">• Make mixtures with children that they can drink.• Explore volume by having children fill jars with different materials.• Teach the <i>letter o</i>.



Unit at a Glance

Week 1

What happens when you mix things together?

Like scientists, children begin experimenting with mixtures. They learn what it means to mix, and they explore tools used to create mixtures. They learn that some mixtures can be separated again and some cannot, and they practice making observations about the experiments that they conduct. They are introduced to tally marks and use them during their experiments. During read alouds, children learn that the phrase “mixed up” has multiple meanings. Self-regulation is also revisited, as children review ways of calming down when they are upset.

Week 2

How we can mix and make bubbles?

Children explore and experiment with bubbles. They continue to think like scientists, as they investigate different ways to make bubbles and explore their properties (e.g. shape, color, size). They review spheres and tally marks, and they compare the relative size of objects. They learn about a new way to calm themselves down when they are upset: blowing pretend bubbles. Additionally, they practice letter sound correspondence in addition to learning about the *letter u* and the *letter x*.

Week 3

How can we make and mix colors?

Using a variety of materials, such as paint, shaving cream, and sand, children learn how colors mix and explore shades of colors. They explore how colors can make us feel, and they learn about the famous abstract artist Wassily Kandinsky. They investigate the *letters i* and *c* and learn a new strategy for calming themselves down using colors. They also begin working on this unit’s class book.

Week 4

How can we make and mix lemonade?

The mixing unit concludes with a nice cold drink of lemonade! Children read books about lemonade and compare methods for making different types of lemonade. They also explore volume, as they count how many scoops it takes to fill a jar with different sized materials. Lemonade is also used as a jumping off point for discussing mindfulness, with children practicing new mindfulness strategies. As the unit draws to a close, children will celebrate what they have learned and listen to their class book read aloud.



Connections to Other Units

Senses

Learning about their world through their senses is of primary importance in preschool. Children explored food using their five senses in Unit 2: “Healthy Kids” and will do so again in Unit 7: “Let’s Eat.” In Unit 5: “Life on the Farm,” children listened to and used wooden blocks to create the sounds of goat hooves. In this unit, children use all of their senses to observe mixtures they create, saving their sense of taste for the final focus on making lemonade.

Letter Learning

Beginning in Unit 2: “Healthy Kids,” we explicitly focused on the letter sound correspondence of individual letters in Message Time Plus®. In this unit, we teach the remaining letters of the alphabet. Children will continue to work on identifying initial sounds in words as alliterations (also known as tongue twisters) are introduced in Unit 7: “Let’s Eat.”

Mindfulness

While mindfulness techniques have been used throughout, in this unit we focus on a book that explores the power of mindfulness. Additional strategies will continue to be taught in each unit.

Self-Regulation

In Unit 2: “Healthy Kids,” we focused on helping children identify when they are upset and introduced ways they could calm themselves down. In this unit, we revisit these ideas and continue to explore new ways children can self-regulate.



Class Book *Learning About Mixing*

Create at least one class book during each unit to which children contribute. These books give children a glimpse into the book-making process. They love to see themselves as authors! Everyone can participate in creating the class book, no matter their level of proficiency. For example, children can cut out pictures from magazines or draw their own. They can write their own ideas or dictate them to you. Use the suggested class book title or let children come up with their own. Invite them to help you create a cover. Bind the book together using folders or three-ring binders. Typically, we suggest you read their book to the class towards the end of the unit and invite families to listen as well. After, place this book in the library for children to read (over and over!).

In this unit children participate in varied experiences with different types of mixtures. They read books about mixtures; they make mixtures; and they look for mixtures in their everyday lives. For the class book, they reflect on their learning and record something they learned. This book will be read aloud and presented to families during Week 4.



Unit Project: *I Spy Mixtures*

Mixtures are common in children's everyday lives. From washing their hands with soap and water, to brushing their teeth with water and toothpaste, to mixing cereal with milk, children use a variety of mixtures on a daily basis. "I Spy Mixtures" is project that invites children to be on the lookout for these mixtures. Photographs, drawings, and writing can be used by both you and children to document what they notice. Make a unit chart titled "I Spy Mixtures" to record children's observations.





Words We Are Learning

New vocabulary words are drawn from both conversation and read-aloud books. These words are often associated with the content of the unit and support children’s comprehension. Add these words to the Unit Chart: “Words We Are Learning” as they are introduced. Use the words frequently in the daily life of your classroom. As children hear these robust words in more contexts, they grow their own vocabulary in an authentic and meaningful way. Invite multilingual children in your class to share the words they use at home for these ideas if they are familiar with them (which they may or may not be). Making connections to words they already know and new English terms will support language acquisition. A translation app or website can assist with spelling.

Week	Word	Definition
1	mixture	things mixed together
	separate	to take things apart
	wise	using what you know to make good choices
	presto	a word to announce that something has been done as if by magic
2	float	move slowly and gently through air or water
	mysterious	strange, when you don’t know about or understand something
	scrub	to clean by rubbing, often with a brush
3	scribble	to draw freely any which way
	sizzling	very hot like fire
	wacky	silly, strange, or make-believe
	dazzling	bright and shiny
4	pinch	a small amount of something
	hurricane	a big storm with wind and rain

When the unit ends, here are some suggestions for how to “retire” the chart:

- Take a picture and post the photograph in your room for reference, for example, at the writing center.
- Save the chart if you have a place where it can be stored and children can reference it.
- Attach it to poster board and make a big book out of it; keep it in your library center.
- Take a picture of the chart and send it home to families. Let them know that these words were introduced during the unit. Encourage them to use the words in conversation. Remind them that children are not expected to be able to read the words or explain their definitions; however, exposure through conversation will build their children’s oral vocabulary, a precursor to reading.



Anchor Words for Multilingual Learners

New English learners find themselves in a sea of language that can be tough to navigate. Anchor words are vocabulary words that activate their background knowledge from their home language and give them a context for learning a new language. Children who speak English at home will not need direct instruction to learn these terms, but, for children who are very new to the English language, these words will be absolutely essential. Because these children are just beginning to develop a bank of English vocabulary, it will be nearly impossible to explain their meaning using words. Gestures, pictures, and directly translating them into the children’s home language using an online translation tool will be the most effective way to help them acquire these invaluable foundations to the English language.

Week	Word
1	mix
	scientist
	apart
	together
2	bubble
	size
3	color
	change
	lighter
	darker
4	lemon



Spotlight on Social Emotional Learning

Self-regulation is a skill children learn over time and with repeated practice. In this unit, we return to explicitly focusing on how children manage their emotions and emotional responses. We help them learn to tune into their feelings and the sensations in their body to build self-awareness and regulate emotions. As a general classroom practice, activities that engage children in relaxing, focusing, and breathing support them in modulating their stress response and building their executive function skills.

When children are relaxed, they are able to think logically and creatively about their behavior and the challenges they face. You can be intentional about creating lessons and opportunities for children to practice relaxation, breathing, and focus on a daily basis to support children's brain development, which will influence children's relationships, learning, and success for a lifetime.

Recommendations for Helping Children Practice Self-Regulation

- Introduce and practice calming strategies while children are relaxed, so they can then draw on the strategies when they feel upset.
- Continue to recommend the use of your Calm Corner as a comfortable place in the room where children can go to access resources and calm down.
- Prior to Center Time, review methods for calming down and where relevant resources can be found.
- Provide one-on-one support to children experiencing difficult emotions during Center Time. Soothe them and then acknowledge and validate their feelings. Scaffold children by providing choices for what to do when they begin to calm down.
- When a child has successfully calmed down, take some time later to help them to reflect on their experience. Talk about what worked for them when they were upset so they might use the same methods in similar circumstances.



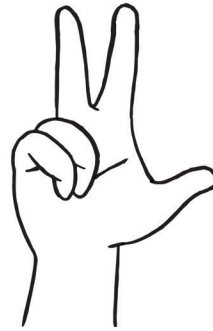


American Sign Language

Yes



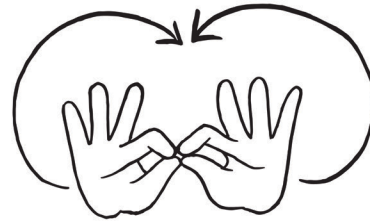
No



I Like



Power of 3



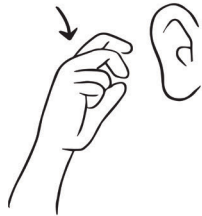
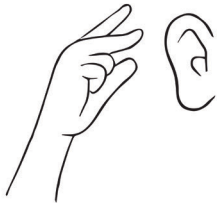
I Predict



I Learned



I Hear



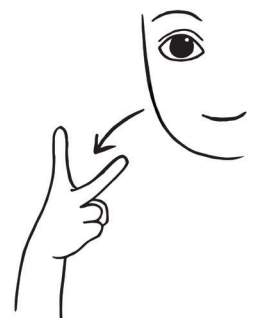
I Remember



I Wonder



I See



CHARTS

Feelings



happy
feliz



sad
triste



silly
loquito,
loquita



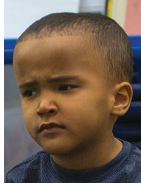
calm
calmado,
calmada



kind
amable



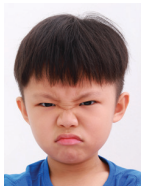
delighted
encantado
encantada



grumpy
gruñón,
gruñona



proud
orgullosa,
orgullosa



upset
molesto,
molesta



glad
alegre



confident
seguro
segura



caring
considerado
considerada

Cheers

Round of Applause



Kiss Your Brain



Hip Hip Hooray



Catch a Star



Stir It Up



Roller Coaster



The Robot



Happy Horse



Readers Can Say

I like



I predict



I remember



I learned



I see



I wonder



We Can Describe

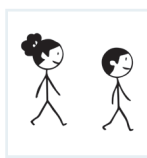
Power of 3

Take Care of
Ourselves

Take Care of
Each Other

Take Care
of Our
Environment

Move safely.



Say, "I can
do it!"



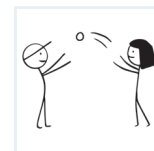
Calm down.



Keep on
trying.



Play
together.



Be helpful.



Act kindly.



Think about
how others
feel.



Put things
away.



Handle books
and toys
carefully.



Throw
away trash.



Treat living
things
carefully.



Anchor Charts

In units one through five children participated in creating several anchor charts. In units six through 10, elements of these anchor charts will be highlighted and reviewed so children can interact with them on a deeper level. Remember to refer to your anchor charts during the natural course of your instruction. The more you model using them for reference, the more the children will use them for their own independent thinking and work.

	Power of 3	Feelings	Readers Can Say	Cheers	We Can Describe
Already Added	Take Care of Ourselves	happy	I like	Round of Applause	Capture descriptive vocabulary using a graphic organizer. Write "We Can Describe" as the title. Label columns with different categories of descriptive words, such as color words (red, blue), size words (large, enormous), texture words (spiky, bumpy), and action words (runs, crawls). This chart should be very responsive to the linguistic and cognitive needs of your children and will therefore vary among different classrooms.
	Move safely.	sad	I predict	Kiss Your Brain	
	Say, "I can do it!"	proud	I remember	Hip Hip Hooray	
	Calm down.	silly	I learned	Catch a Star	
	Keep on trying.	grumpy	I see	Stir It Up	
	Take Care of Each Other	upset	I wonder	Roller Coaster	
	Play together.	calm		The Robot	
	Be helpful.	glad		Happy Horse	
	Act kindly.	kind			
	Think about how others feel.	confident			
	Take Care of Our Environment	delighted			
	Put things away.	caring			
	Handle books and toys carefully.				
	Throw away trash.				
	Treat living things carefully.				

Unit Charts

Unit charts will continue to be created. These reflect each unit's specific content. They should be built and referenced the same way that anchor charts are. However, they will be referenced less frequently throughout the year. Plan your display accordingly.

Unit Charts:

- "Words We Are Learning"
- "Tally Marks"
- "Color Mixing"



Supporting Multilingual Learners

Incorporating multilingual children's home languages into instruction helps children learn more effectively. Add home languages to anchor charts, schedules, and displays. Online translation tools can help.

CENTERS

An essential part of your day is Center Time. Center Time supports the development of children's creative, social, cognitive, and language skills.

Each unit has its own suggested theme related activities and a timetable for introducing them. Offer other choices as well that reflect your children's interests and needs. Centers are also a great place for children to continue practicing and extending their learning from small group and large group activities. Look for "Keep It Going" tips throughout the unit guide where we suggest ways to incorporate materials and ideas from your lessons into your centers. When interacting with children at centers, use the strategy of "Layered Questioning." This involves scaling the discussion to each child's language ability, so they can respond anywhere from using gestures to one word responses to more open ended ones. This will build their confidence and stretch their language skills.





► **Week 2 | Bubble Wrap Painting**

Children create prints using paint and bubble wrap.

Creative Arts: Visual Arts



► **Week 2 | Painting With Music**

Children paint as they listen to flute music by Mary Youngblood.

Creative Arts: Visual Arts

► **Week 3 | Ice Painting**

Children mix primary colors of paint.

Creative Arts: Visual Art



Materials	Directions
Bubble wrap, paint, tape, paintbrushes, large paper	Tape bubble wrap face up on a table. Invite children to paint the bubble wrap. Encourage them to mix and alternate colors. When they are done painting the bubble wrap, carefully place paper over the top, press lightly, rub, and pick up to create a print.

Use what you know about each child's language skills to start conversations:

- Gesture: Point to the colors you want to use today.
- Yes/No: Do you want to use [color] today? Do you like painting with bubble wrap?
- Either/Or: Do you want to use [color] or [color] today? Do you think it is easy or hard to paint on bubble wrap?
- Open-ended: What does it feel like to paint on bubble wrap? What do you think the print will look like when you are done? Do you like painting with bubble wrap? Why?

Materials	Directions
Paint, paintbrushes, paper, paint trays	Play flute music by Mary Youngblood. Discuss with children how the music makes them feel and what it makes them think about. Invite them to paint as they listen. Encourage them to use different colors as the music changes.

Use what you know about each child's language skills to start conversations:

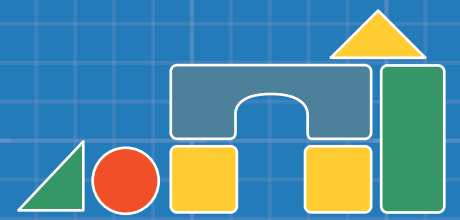
- Gesture: Point to the colors you want to use while you listen to music today.
- Yes/No: Does this music make you think of [color]? Do you like [color]?
- Either/Or: Do you want to use [color] or [color]? Do you feel [name a feeling] or [name a different feeling]?
- Open-ended: What does this music make you think of? Why are you using [color]? How does this music make you feel?

Materials	Directions
Ice cube trays, various colors of food coloring, water, measuring cup, tape, large tray	Make colorful ice cubes by pouring water into the ice cube trays, adding a drop or two of food coloring to each, and freezing overnight. Then tape paper to the inside of a tray. Invite children to paint by adding a colorful ice cube to the tray and sliding the different color ice cubes around the paper.

Use what you know about each child's language skills to start conversations:

- Gesture: Point to the colors you want to use today.
- Yes/No: Do you want to paint with [color]? Do you like painting with ice cubes? Is it easy to paint with ice cubes? Are the colors mixing together?
- Either/Or: Do you want to paint with [color] or [color]? Are you going to move the tray around slowly or quickly?
- Open-ended: What do you think painting with ice will feel like? How did you make your painting today? What happened to the ice and paint as you moved the tray around?

Blocks



- **Week 2 | Popping Bubble Wrap**
Children explore popping bubble wrap.
Science: Physical Sciences

Materials

Bubble wrap

Directions

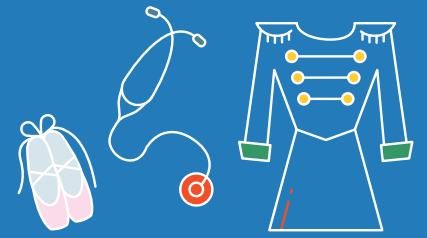
Invite children to pop the bubble wrap using their hands and different materials available at the block center.

Use what you know about each child's language skills to start conversations:

- Gesture: Show me the bubble wrap. Show me something you can use to pop the bubble wrap.
- Yes/No: Can you pop the bubble wrap with your hands? Can you pop the bubble wrap with [wooden block, foam block, Lego, etc.]?
- Either/Or: Do you want to pop the bubbles with [object] or [object]? Is it easier to pop with [object] or [object]?
- Open-ended: What objects could you use to pop this bubble wrap? Which object is the easiest to use to pop the bubble wrap? Which is the hardest to use?



Dramatic Play



► Week 1 | Science Lab

Children pretend they work in a science lab.

Creative Arts: Dramatic and Performance Art



Materials

Various containers (such as bowls and cups), various mixing tools (such as spoons and forks), tongs, pipettes, magnifying glasses, timers, beakers, measuring tape, lab coats or large white shirts, and safety glasses.

Involve families by requesting examples of relevant props that they may have available.

Directions

Include children in design conversations. Encourage them to make signs and add props. Discuss what children might do in science lab. You might create mixing stations with various containers of clear and colorful water. Offer a variety of “powders” in small, resealable containers.

Use what you know about each child’s language skills to start conversations:

- Gesture: Show me the [tool]. Show me how you make a mixture.
- Yes/No: Are you going to make a mixture? Are you going to use this [tool] to mix? Are you going to record your observations? Can you separate or unmix your mixture?
- Either/Or: Are you going to use this [tool] or this [tool] to mix? Are you testing to see if your mixture separates or not?
- Open-ended: What work will you do in the science lab today? What questions do you have? What predictions are you making? What do you observe?



Observe and Delight

Dedicate some time to focus on children’s play by positioning yourself near the action at the dramatic play center. Engross yourself in watching the pretend play develop. Use body language and facial expressions to encourage children’s play by quietly conveying to them that you are very curious about their ideas and that you are delighted with their play. You will get to know them well, and they will get the message that dramatic play and their own ideas are significant in the classroom and important to you.



Library



- ▶ **Week 1 | Mixing Book Basket**
Children read books that feature different kinds of mixtures.
Literacy: Literate Attitudes and Behaviors

Materials	Directions
Books	Gather books related to this topic. Store them in a basket that is clearly labeled with words and pictures. Share the titles with children to build their excitement.

Use what you know about each child's language skills to start conversations:

- **Gesture:** Show me the book you want to read today. Point to the front cover. Point to the back cover. Point to the [pictures, text, person, animal, etc].
- **Yes/No:** Do you want to read [title] today? Is this the [part of book]? Do you think this book is about mixtures? Do you like this part of the story?
- **Either/Or:** Do you want to read [title] or [title] today? Is this [point to part of book] or this [different part of book] the book? Did you like when [event in story] or [event in story] happened best?
- **Open-ended:** What kinds of mixtures did you notice in this book? What are you learning about mixing? What questions do you have?

Tip

Remember to cozy up with children and read informally with them on a daily basis.

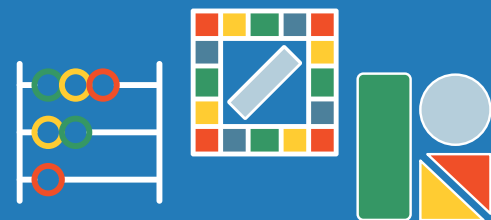
Tip

Support Book Handling Skills

Create a large replica of a book the children can use to practice turning pages. Collect three or four brown paper shopping bags and cut apart the front and back panels. Place these in a pile, fold them down the middle and staple the folded side. Use this “book” to review how to turn the pages of a book carefully. You can show them how easy it is to rip or rumple a page. Make other model books and have children draw or write on the pages. Place these “books” in the library corner so the children can use them to practice page turning.



Math and Table Toys



► Week 2 | Rolling Dice

Children roll dice to make numbers one through 10.

Math: Operations and Algebraic Thinking

Materials

Two dice, several copies of a one through 10 number line

Directions

Download and print an example of a number line from the *Blueprint* website. Invite children to roll the dice and circle the matching number on the number line. They should try to play until all the numbers are circled.

Use what you know about each child's language skills to start conversations:

- Gesture: Show me the number on the dice. Show me the number on the number line.
- Yes/No: Is this the number? Are you on the number? Does [number] come next?
- Either/Or: Is this the number _____ or _____? Are you on the number _____ or _____? Does (number) or [number] come next? Did you roll the number _____ or _____?
- Open-ended: What number did you roll? How do you know? What number comes next on the number line? How do you know?

Tip

Display Books

Make sure books are displayed at different centers around the room. For example, put counting books in your math center and science books in your science center. Take time to model that reading happens everywhere, not just in the library!



► Week 3 | Building Shapes

Children combine shapes to create designs.

Math: Geometry and Spatial Reasoning

Materials

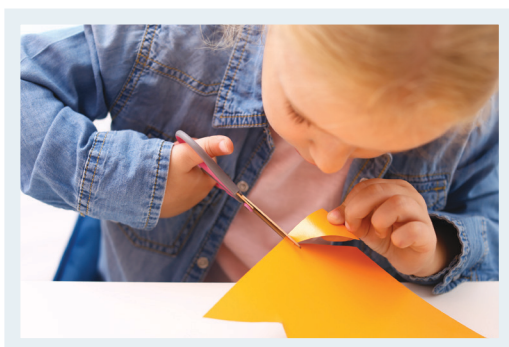
Construction paper in multiple colors, scissors

Directions

Cut different types and sizes of shapes out of construction paper. Laminate if possible. Invite children to combine these shapes to create new images and designs.

Use what you know about each child's language skills to start conversations:

- Gesture: Show me the [shape]. Put the [shape] next to the [shape].
- Yes/No: Is this a [shape]? Can you make a [shape] with these pieces?
- Either/Or: Is this a [shape] or [shape]? Can you make a [shape] or [shape] with these pieces?
- Open-ended: What shapes do you have? What can you make with these shapes? What shapes can you make if you put these two pieces together? What else could you make with them?



Science



▶ Week 2 | DIY Bubble Wand Children create their bubble wand.

Science: Physical Sciences

Materials

Pipe cleaners, bubble solution, examples of bubble wands

Directions

Display examples of bubble wands. Encourage children to create their own bubble wands out of bent pipe cleaners. Let children decide on the shapes. They can test out the wands using bubble solution. Are the bubbles always in the shape of spheres?

Use what you know about each child's language skills to start conversations:

- Gesture: Show me the shape you want to make.
- Yes/No: Is your bubble wand in the shape of [name a shape]? Are the bubbles in the shape of a [shape]?
- Either/Or: Did you make a [shape] or a [shape] in your bubble wand? Are your bubbles [shape] or [shape]?
- Open-ended: How did you make your bubble wand? What shape did you make it? What shape are the bubbles? What other materials could we use to make a bubble wand?

Tip

Supporting Multilingual Learners

Do you have children in your class who speak one or more languages other than English at home? Encourage them to teach each other about their languages so everyone can benefit from being multilingual.



Sensory Table



- **Week 2 | Bubble Bath**
Children scrub their pets at the water table.
Science: Life Sciences

Materials

Plastic animals, empty shampoo and soap containers, washcloths, scrub brushes, soap

Directions

Gather materials and add them to the sensory table. Refer to the book *How To Wash A Woolly Mammoth*. Remind children that the girl took care of her woolly mammoth by giving it baths to keep it clean. Invite children to bathe their “pets.”

Use what you know about each child’s language skills to start conversations:

- Gesture: Thumbs [up/down] if you take bubble baths. Thumbs [up/down] if you have ever washed a pet.
- Yes/No: Do you take bubble baths? Do you have a pet? Do you think pets get dirty? Have you ever given a pet a bath?
- Either/Or: Do you take a bath with or without bubbles? Do you think pets like to take baths or do not like to take baths?
- Open-ended: Do you think pets like to get bathed? Why or why not? Why do you think it’s important to keep pets clean? What do you think makes your [dog, cat, bird, etc.] dirty?

Pencil Grip

Give children lots of opportunities to get feedback from their fingers (known as tactile perception). Invite them to explore sensory bins filled with sand, dirt and beads (careful of small pieces!). On the other hand, limit screen time as children do not get the finger feedback they need on a touch screen.



Technology



- ▶ **Week 4 | Recipe Book**
Children will find or write recipes.
Science: Engineering and Technology

Materials	Directions
Tablet or computer	Ask children what kind of recipes they want to find or write. Use a search engine of choice to find these recipes (search ahead of time and then guide children). Encourage them to scroll through the recipes and notice different features, such as the list of ingredients and directions. After looking through the recipes, ask children to write their own. Remind them how to open writing and drawing apps. Show them how to open and navigate the document or file to view their classmates' contributions. Extend the activity by printing out each child's work and creating a book for the library or dramatic play area.

Use what you know about each child's language skills to start conversations:

- **Gesture:** Show me the app we use to find information. Show me the app we use to write or draw.
- **Yes/No:** Do you want to write a recipe for [person]? Would you put [ingredient] in this recipe? Have you ever made [food] with a family member?
- **Either/Or:** Do you want to write a recipe for [person] or [person]? Would you put [ingredient] or [ingredient] in the recipe?
- **Open-ended:** Who usually cooks at your house? What do they make? How do you help? What kind of recipe do you want to find or write today? What types of ingredients do you think you need to make [food]? What do you think you could make with [ingredient]?



Writing



► Week 1 | Speech Bubble Stories

Children write inside speech bubbles.

Literacy: Writing

Materials

Speech bubble paper, markers, crayons, pencils

Directions

Download and print examples of the speech bubble paper from the *Blueprint* website. Encourage children to draw themselves or a character from a book. What would they be saying? They can add the words in the speech bubble.

Use what you know about each child's language skills to start conversations:

- Gesture: Show me the person you drew. Show me the speech bubble.
- Yes/No: Is the person talking to someone else? Is the person happy? Do you know the first letter of the word you want to write?
- Either/Or: Is the person talking to a friend or a family member? Is the person happy or sad? Do you hear [sound] or [sound] at the beginning of that word?
- Open-ended: Who are you drawing? What is that person feeling? What is that person saying? What sound do you hear at the beginning of the word [word]?

► Week 1 | Creating Soup

Children create a chart of items that do or do not belong in soup.

Literacy: Writing

Materials

Chart paper, markers, different pictures (magazines, circulars, printouts, etc.) of edible and non-edible things, sticky notes

Directions

Remind children that the pig in *Is That Wise, Pig?* tried to put all kinds of silly ingredients into the soup. Create a chart divided into two categories: things you might put in soup, and things you might not. Invite children to help you place the pictures on the chart based on whether or not the items belong in soup. They should add their own ideas by drawing and writing on sticky notes.

Use what you know about each child's language skills to start conversations:

- Gesture: Point to the [ingredient]. Thumbs [up/down] if it should go in the soup.
- Yes/No: Is this the [ingredient]? Should it go in soup? Do you like soup? Do you like [type of soup]?
- Either/Or: Is this [ingredient] or [ingredient]? Can [ingredient] or [ingredient] go in the soup? Do you like [type of soup] or [type of soup]?
- Open-ended: What does this picture show? Should you put that in soup? Why or why not? What else can we put in soup? What else should we not put in soup? What kind of soup do you like to eat? What ingredients do you think are in that kind of soup?



Writing



- ▶ **Week 3 | I Like the Color...**
Children create collages of their favorite colors.
Literacy: Writing

Materials	Directions
Paper, various colors of crayons/markers, various colors of scraps of paper, etc., scissors, glue	Encourage children to fill a page with scribbles and scraps of their favorite color.

Use what you know about each child's language skills to start conversations:

- Gesture: Show me your favorite color. Show me something blue.
- Yes/No: Is your favorite color _____? Does this scrap of paper belong on your page?
- Either/Or: Is your favorite color _____ or _____? Are you going to add this scrap of paper or this one?
- Open-ended: What is your favorite color? Why? What color collage are you going to create? What materials are you going to add to it? What else in our classroom is that color? What else outside is that color?

- ▶ **Week 4 | Color Word Sequencing**
Children rearrange letters to write the name of a color.
Literacy: Phonological Awareness

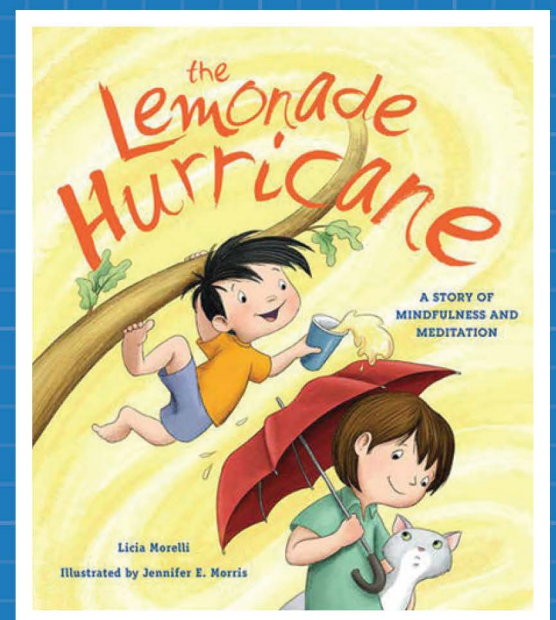
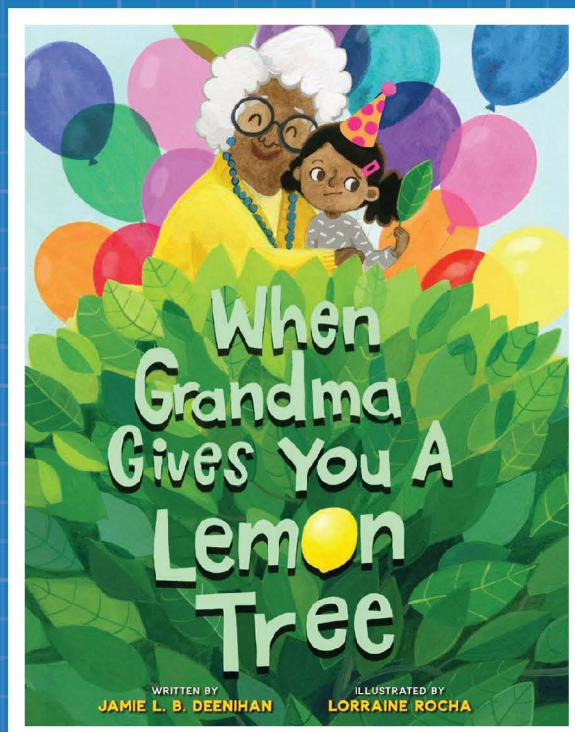
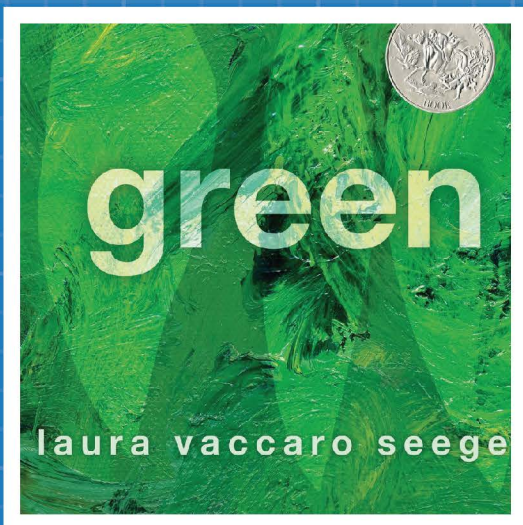
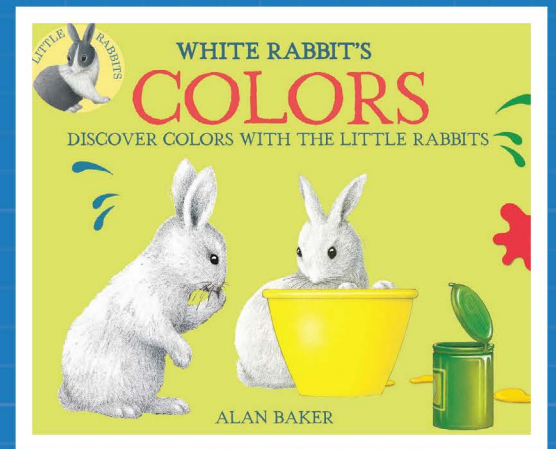
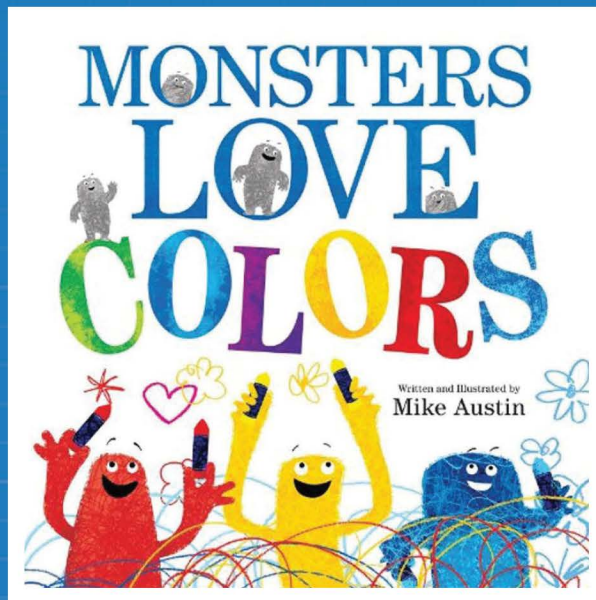
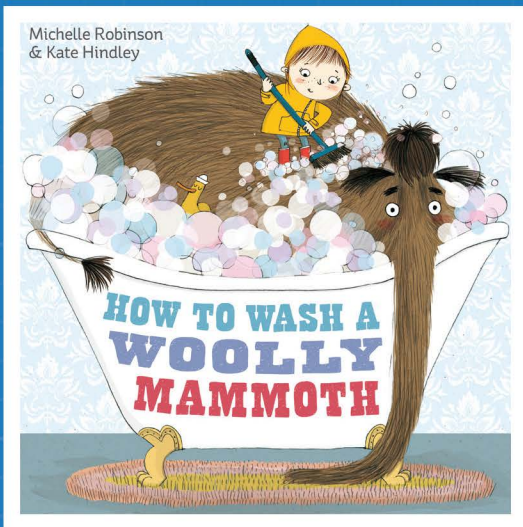
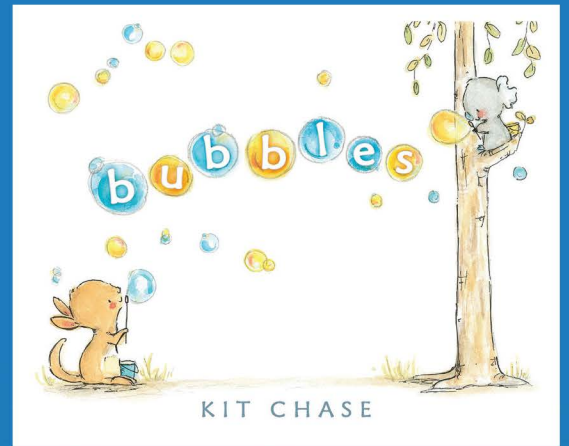
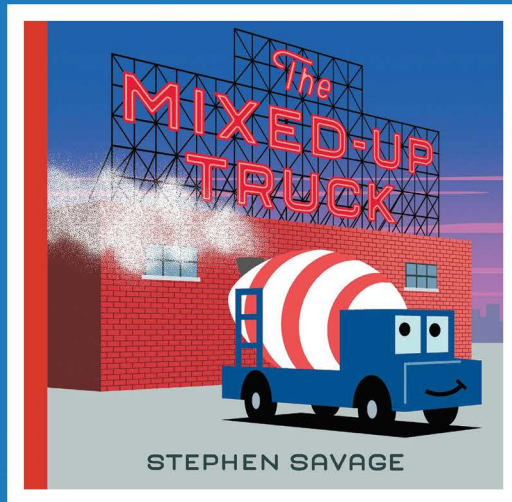
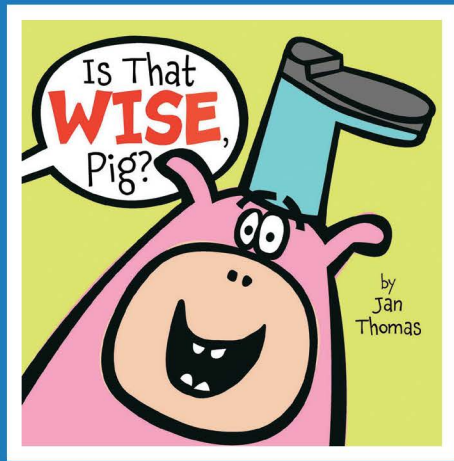
Materials	Directions
White sentence strips, markers of different colors, scissor, paper clips	Write the names of colors on white sentence strips using the corresponding marker color. Cut the words into pieces, separating the letters, like a puzzle so it is self-checking. Add the matching marker and color word puzzle to a baggie. Invite children to put the letters in order.

Use what you know about each child's language skills to start conversations:

- Gesture: Show me the color [color]. Show me the letter [letter].
- Yes/No: Is this [color]? Is this the letter [letter]? Are you spelling the color [color]?
- Either/Or: Is this the color [color] or [color]? Is this the letter [letter] or [letter]? Does the letter [letter] or [letter] come next?
- Open-ended: What color word are you spelling? How do you know? How can you check to see if that is the next letter in the word? Can you name all the letters in that word?



BOOKS



The children's books suggested here are readily available through Children's Literacy Initiative, most school or public libraries, or your local school equipment supplier.

Descriptions

Is That Wise, Pig?

- Written and illustrated by Jan Thomas
- Beach Lane Books, 2016

Cow and Pig want to help chef Mouse make soup. In quantities from one to 10, Mouse and Cow contribute a variety of vegetables, but Pig offers umbrellas and galoshes! The chef questions Pig's judgment. "Is that wise, Pig?" This silly book introduces children to the idea of wise choices and invites them to practice counting objects from one to 10. The speech bubbles used in the book provide a wonderful example of how dialogue can be expressed differently in print.

Vocabulary

- wise: using what you know to make good choices

How to Wash a Woolly Mammoth

- Written by Michelle Robinson
- Illustrated by Kate Hindley
- Henry Holt and Co., 2013

In this humorous picture book, a girl clad in a protective yellow raincoat demonstrates how to wash a woolly mammoth. From step one (fill the tub) to step 10 (throw in the towel and snuggle), children will laugh at the ridiculousness of a prehistoric creature in a modern day bathroom, the small girl's struggles to contain and clean such a large animal, and the mammoth's escape. An excellent entry point for discussing how bubbles form, children also practice using tally marks and exploring the concept of taking care of others.

Vocabulary

- scrub: to clean by rubbing, often with a brush

Green

- Written and illustrated by Laura Vaccaro Seeger
- Roaring Brook Press, 2012

Have you ever thought about all the different shades of green? This book playfully introduces children to this idea, and the painted pages show how colors are mixed to create new ones. Greens from peas, grass, jungles, and the ocean are portrayed with descriptive language in this exploration of shades of color.

Vocabulary

- wacky: silly, strange, or make-believe

The Mixed-Up Truck

- Written and illustrated by Stephen Savage
- Roaring Brook Press, 2016

Cement mixer is supposed to mix up some powdery white cement, but accidentally combines flour and water, creating a towering cake. Oops! After several more tries, cement mixer gets it right and helps to build a tall building. A final mixture results in a great big bubble bath for all of the dusty trucks. This book provides children with both an introduction to the science of mixing and an invitation to discuss the importance of trying again when you make a mistake.

Vocabulary

- presto: a word to announce that something has been done, as if by magic

Monsters Love Colors

- Written and illustrated by Mike Austin
- HarperCollins, 2013

This boisterous book features enthusiastic monsters wielding bright crayons, as they announce their favorite primary colors with dances, roars, and lots of squiggly lines. The monsters mix their colors to create green, orange, and purple, as action words dance across the page. Children create their own colorful scribbles and experiment with colors, as well as practice making predictions.

Vocabulary

- scribble: to draw freely any which way

When Grandma Gives You a Lemon Tree

- Written by Jamie L. B. Deenihan
- Illustrated by Lorraine Rocha
- Sterling Children's Books, 2019

On her birthday, a young girl receives a lemon tree instead of the gadgets she wanted. Gradually her disappointment turns to delight, as she nurtures the plant and harvests its lemons. This introduction to a new mixture, lemonade, allows children to practice making predictions and identifying how a character's emotions may change throughout a book.

Vocabulary

- pinch: to take a small amount of something
- dazzling: bright and shiny

Bubbles

- Written and illustrated by Kit Chase
- G.P. Putnam's Sons Books for Young Readers, 2018

Children begin their investigation of bubble mixtures with this book about friendship and courage. Kangaroo and Koala both love to blow bubbles, but Koala hides in a tree, too shy to play. Their shared love of bubbles brings them together, and their bravery saves the day! Children practice making predictions, learn a new calming strategy, and review how to take care of each other as they watch Kangaroo and Koala's friendship develop.

Vocabulary

- mysterious: strange, when you don't know about or understand something

White Rabbit's Colors

- Written and illustrated by Alan Baker
- Kingfisher, 1999

A curious white rabbit finds three tubs of paint—yellow, red, and blue. The rabbit takes a dip in different colors, observing how the combinations create new ones. Descriptive language helps children make artistic and emotional connections to the colors. This demonstration of basic color mixing encourages children to make predictions about what color the white rabbit will become next.

Vocabulary

- sizzling: very hot like fire

The Lemonade Hurricane

- Written by Licia Morelli
- Illustrated by Jennifer E. Morris
- Tilbury House Publishers, 2015

Emma's little brother is a lemonade-drinking, havoc-wreaking human whirlwind, and she wants to help him find his inner stillness. As Emma shows Henry how to sit, bow, and breathe, children reflect on what they have learned so far about mindfulness and calming yourself down.

Vocabulary

- hurricane: a big storm with wind and rain

UNIT 6 WEEK

Be Sure To...

- Get children thinking about mixing and mixtures.
- Give children opportunities to mix water and common powders (salt, sugar, cornstarch, etc.).
- Ask children to make predictions and observations.
- Introduce tally marks.

Materials

- Collect materials for a Mixing Tool Collection Box (e.g. craft sticks, chopsticks, a whisk, and spoons of various sizes and materials)
- Mixing bowls, measuring cups, and measuring spoons
- Salt, sugar, and cornstarch

Books

- *Is That Wise, Pig?*
- *The Mixed-Up Truck*
- *Hey, Hey, Hay!*
- *Blueprint Songbook*

Charts

- Anchor Charts:
 - “Feelings”
 - “Power of 3”
 - “We Can Describe”
 - “Readers Can Say”
- Unit Charts:
 - “Words We Are Learning” (make)
 - “Tally Marks” (make)

What happens when you mix things together?

When you mix, you combine two or more things together. You need to observe closely to learn more about your mixtures.

Like scientists, children begin experimenting with mixtures. They learn what it means to mix, and they explore tools used to create mixtures. They learn that some mixtures can be separated again and some cannot, and they practice making observations about the experiments that they conduct. They are introduced to tally marks and use them during their experiments. During read alouds, children learn that the phrase “mixed up” has multiple meanings. Self-regulation is also revisited as children review ways of calming down when they are upset.

Keep In Mind

- Begin preparing items for your dramatic play center, “The Science Lab,” for Day 4: Talk Time.
- Remember to keep a copy of the “Letter and Numeral Formation Guide” near your Message Time Plus board. It can be downloaded from the Blueprint website. As you pause to focus on letters and numerals to teach and/or review, consult this document for clarity and consistency. Repetition of these descriptions will support children as they learn letter names, sounds, and begin forming letters in their own writing. It will also support children as they learn numerals and form numerals in their own writing.
- Ask families to send in some of the mixing supplies that are needed for lessons in this unit.
- If you haven’t already, invite children to co-create a number line, as they did the class-made food alphabet in Unit 2. What is there “one of” in the class (e.g. the sink)? What is there “two of” in the classroom (e.g. two doors)? Label each page with a number, and then ask children to draw the pictures. Display the completed number line so children can easily access it. Model and guide them in using this important mathematical resource.



Words We Are Learning

mixture
things mixed together

separate
to take things apart

wise
using what you know to make good choices

presto
a word to announce that something has been done as if by magic



From the Songbook

“The Mixing Song”

This song is used during Greeting Time. Copy the lyrics, and send home to families.



Working with Families

Invite families to highlight ways they use mixing at home and the ways they see children using them. Have them send photos or descriptions to share.



Multilingual Learner Anchor Words

- mix
- scientist
- apart
- together



Trips & Visitors

Invite family or community members that work in a lab or are scientists to visit the classroom.



Remember | <https://clibblueprint.org/resources-tx>

You can find downloads, videos and more on the Blueprint website.

	Day 1	Day 2	Day 3	Day 4	Day 5
Greeting Time	Children learn a song about stirring. <i>Creative Arts: Music</i>	Children sing a version of the song about swishing. <i>Creative Arts: Music</i>	Children sing a version of the song about shaking. <i>Creative Arts: Music</i>	Children sing with partners and choose the action. <i>Creative Arts: Music</i>	Children pretend to make a mixture as they sing. <i>Creative Arts: Creative Movement and Dance</i>
Movement Time	Children do a stirring action with different body parts. <i>Physical Development: Gross Motor Skills</i>	Children do a swishing action with different body parts. <i>Physical Development: Gross Motor Skills</i>	Children alternate shaking opposite hands and feet. <i>Physical Development: Gross Motor Skills</i>	Children do different actions at the same time. <i>Physical Development: Gross Motor Skills</i>	Children do a balancing exercise. <i>Physical Development: Gross Motor Skills</i>
Talk Time	Children make a toy mixture. <i>Science: Scientific Inquiry and Practices</i>	Children learn about a scientist and science labs. <i>Science: Scientific Inquiry and Practices</i>	Children review ways to calm down when they feel upset. <i>Social Emotional: Self-Awareness and Self-Concept</i>	Children launch the science lab dramatic play center. <i>Creative Arts: Dramatic and Performance Art</i>	Children begin to notice mixing in their daily lives. <i>Approaches to Learning: Initiative and Curiosity</i>
Message Time Plus	Children explain why some tools are good for mixing. <i>Science: Engineering and Technology</i>	Children learn about speech bubbles. <i>Literacy: Print Concepts</i>	Children learn the word “wise.” <i>Literacy: Vocabulary</i>	Children learn that tally marks can represent numbers. <i>Math: Numbers and Number Sense</i>	Children vote for a book using tally marks. <i>Math: Numbers and Number Sense</i>
Intentional Read Aloud	Children tell if they think the pig is making wise choices. <i>Literacy: Comprehension</i>	Children say the characters’ words with expression. <i>Literacy: Fluency</i>	Children count objects one through 10. <i>Math: Numbers and Number Sense</i>	Children act out making the mixtures the truck makes. <i>Literacy: Comprehension</i>	Children discuss how the character keeps trying. <i>Approaches to Learning: Persistence and Attentiveness</i>
Small Group	Children mix and unmix classroom toys. <i>Science: Scientific Inquiry and Practices</i>	Children mix classroom toys in water. <i>Science: Scientific Inquiry and Practices</i>	Children investigate what happens when they mix salt and water. <i>Science: Physical Sciences</i>	Children investigate what happens when they mix sugar and water. <i>Science: Physical Sciences</i>	Children create a mixture with cornstarch and water. <i>Science: Physical Sciences</i>
Reflection Time	What did you mix together today?	If you worked in a science lab, what would you mix?	Who would you describe as wise? Why?	Have you ever gotten mixed up before? Why?	What happens when you mix things together?

Centers to Launch

See Pages 14-25

Dramatic Play Center | Science Lab

Writing Center | Speech Bubble Stories

Writing Center | Creating Soup

Library Center | Mixing Book Basket



Greeting Time

Children learn a song about stirring.

Creative Arts: Music

STATE that some scientists study living things and others experiment with mixing.

We just explored what happens on a farm. We learned about farm animals and farmers. Farms are very busy places! Sometimes when farmers get tired, they take a break for a nice cold drink like a switchel [show page]. When these farmers made their switchel, they mixed together different ingredients [review recipe]. We are going to be making lots of mixtures in our classroom too!

SHOW spoons. **INVITE** children to show the action of stirring.

One way we can mix things together is by stirring with a spoon [show]. Can you pretend to stir with a spoon like this [demonstrate]? Yes, when you stir, you move a spoon around and around [show stir picture card].

INTRODUCE “The Mixing Song.” **INVITE** children to sing and act it out.

Let’s stir as we sing a song about mixing like scientists.

Stir, stir, stir it up
[do stirring action]

All the way through!

We are all scientists,
[point to yourself]

I wonder what we’ll do!
[turn both hands up]

Please join in singing “The Mixing Song”!

Make & Prepare

- Download and print a picture card for the word “stir.”
- Bring a few spoons of varying sizes and materials (e.g. wooden, metal, plastic).
- Familiarize yourself with the “The Mixing Song” [Sung to the tune of “Row, Row, Row Your Boat”] on the *Blueprint* website.



Additional Materials

- *Blueprint Songbook*
- The book *Hey, Hey, Hey!*



Supporting Multilingual Learners

Teach the words “scientist” and “mix” to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children’s home language (use an online translation tool). This will support their comprehension of the thematic content.



Movement Time

Children do a stirring action with different body parts.

Physical Development: Gross Motor Skills

THINK ALOUD about doing a stirring action with other body parts.

Stirring is one way we can mix things together. When we stir, we move a spoon around with our hands. But I wonder what other body parts we could stir?

MODEL and **GUIDE** children to stir with each foot, circling in each direction.

Can you hold onto your foot and stir it around and around like this [demonstrate]?

Now stir it the other way like this [demonstrate].

Stir your other foot!

INVITE children to stir with their hips. **ASK** them to suggest other body parts to try.

Now let’s stand up. Try stirring your hips around and around like this [demonstrate].

Can you stir them the other way?

What other body parts can we move around in a circle?

Remember...

While the components of Gathering Time can be taught one right after the other, each part can also stand alone. You may use one as a transition activity, or repeat the song or movement at another time of day. Reflection Time, though, is intended for the end of the day to give children closure on their daily experiences.

Connections to Other Units

We learned the action word “stir” in Unit 2: “Healthy Kids” when we discussed preparing nourishing foods.

Supporting Multilingual Learners

To help new English learners make connections, use realia, pictures, or gestures wherever possible. Acting out the word “stir” supports comprehension.



Talk Time

Children make a toy mixture.

Science: Scientific Inquiry and Practices

SHOW two bins of different toys (i.e. farm animals and trucks). **INVITE** children to mix the toys together.

Stirring is one way to mix things together. But there are other ways to mix things, too. Here we have a bin of farm animals and a bin of toy trucks.

How can we mix the animals and the trucks together?

Who can mix the animals and trucks? Do you want to use a spoon to stir them?

ASK children what they notice. **DEFINE** “mixture.” **ADD** it to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language).

What do you notice about the two kinds of toys now?

Yes, we mixed them. Now the toys are mixed together. We made a toy mixture. Say that word “mixture.” Can you find the beats or syllables? Mix-ture. Let’s add “mixture” to the new list of words we are learning. Do you know any words that mean the same thing?

I wonder what other kinds of mixtures we can make. Just like scientists, we will be experimenting with mixing!

Make & Prepare

- Two bins of different objects (i.e. toy farm animals and trucks). They should be easily mixed and separated.
- Create a new Unit Chart: “Words We Are Learning.”



Remember to Save

Save the toy mixture for Small Group Day 1.

Words We Are Learning

mixture: things mixed together



Did You Know?

There are different kinds of mixtures. A heterogeneous mixture is made when two or more components are combined but do not chemically change. They keep their original properties and can be easily separated (like the toys in Talk Time).

Before

ACTIVATE children’s knowledge around tools. **SHOW** several tools related to writing and one that is not.

We do a lot of writing and drawing in our class! What are some tools we use when we write and draw? Can we use a pencil [show] to write and draw? Can we use a marker [show] to write and draw? Can we use a hammer [show] to write and draw? No! Hammers are building tools not writing tools.

CONNECT to exploring what happens when you mix things together. **SHOW** the title page of the book *Is That Wise, Pig?* **INVITE** children to name to tools the animals are using to make their soup.

Today we are going to read a book called *Is That Wise, Pig?* [show the title page]. What do you think this book is going to be about? How can you tell?

Yes, this book has to do with cooking. There is a big pot in the background [point]. The mouse is wearing an apron and a chef’s hat [point]. The mouse has a cup and is holding a spoon.

ASK children which tool they will use for mixing. **DISCUSS** why a spoon is good for mixing.

Which one of these tools do you think they will use to mix? Why?

Yes, they can use a spoon to mix. We think a spoon is good for mixing and stirring because... [it has a handle you can easily hold; the scoop part stirs to combine things; it’s the right size to fit inside a bowl or container you use for mixing, etc.]

Today I am going to write about a spoon because it’s a mixing tool.

During

DRAW a picture of a spoon. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute. .

Here is a picture of a spoon. What kind of lines should I use to draw the handle? Straight or curvy?

Suggested message: “Spoons help us mix.”

PAUSE to focus on concepts of print (using a period).

I just finished writing the sentence. To show that the sentence has ended, I am going to add a period. Watch as I write a period. A period is a dot. Now you try writing a period with your finger in the air.

INVITE children to reread the message with you.

After

PLAY the game “Would You Use This Tool to Mix?” **INVITE** children to take turns selecting a tool from the box. **ASK** if it would be a good tool for mixing and why.

We know that a spoon is a good tool for mixing! As you stir with a spoon, it mixes things together. It has a long handle [point] that is easy to hold on to. It has a scoop part [point] that moves things around and mixes them. I wonder what other tools are good for mixing. Let’s play a game called “Would You Use This Tool to Mix?” First, we will choose a tool from this box [point]. Then we will look closely at it, feel it, and think about what it can be used for. Last, we can say if we would use this tool to mix and tell why. Let’s try one together.

SUMMARIZE children’s thinking about the tools and what makes a tool good for mixing

Today we compared different tools and thought about which ones were good for mixing. We said that...

Let’s leave these tools out at the sensory table, and you can test your ideas!

REREAD the message one more time.

[Transition] **ASK** children to stir like a spoon.

In Movement Time we stirred different parts of our bodies. Let’s stand up and stir our hips again. Now let’s stir our wrists. What else can we stir?



Make & Prepare

Gather a variety of objects—some should be better for mixing (whisk, different examples of spoons such as wooden, metal, plastic) than others (eye dropper, ribbon); some should be somewhere in-between (e.g. plastic knife, measuring cup) so children can think and talk about why they might be or not be good for mixing.

Additional Materials

- The book *Is That Wise, Pig?*
- Pencil
- Marker
- Hammer (toy or real one)

Responding to Children

During this lesson, you are asking children to apply what they know so far about mixing to tools they might use. The key to this game is to encourage children to explain their thinking. Asking children why they would use a tool that is not conventionally used for mixing will elicit interesting conversation about how we use tools and creative uses for objects.

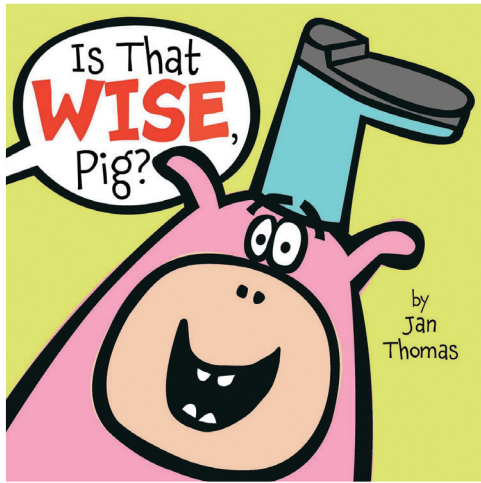
About the “Pause to focus on...”

Message Time Plus gives you an opportunity to focus on a variety of literacy skills during an authentic reading and writing experience. The “Pause to focus on...” generally focuses on four areas of literacy: phonological awareness, concepts of print, vocabulary, and writing structure. These are important foundational areas for emerging readers and writers to be exposed to on a regular basis. We offer a suggested topic for the “Pause to focus on...” for each lesson. Adapt this to meet the needs of your individual learners.



Keep it Going

- Provide children with craft materials (such as pipe cleaners, clay, and string) to make their own mixing tools. Encourage children to think about what makes something a good mixing tool (for example, it has a handle and/or something on it to use to stir). Invite them to create their own mixing tool and have them test it out. What can they mix with their tool? Does it have a handle? A scoop to mix?



Make & Prepare

- Review the ASL signs for “yes” and “no” on the *Blueprint* website.

Additional Material

- Unit Chart: “Words We Are Learning”

Words We Are Learning

wise: using what you know to make good choices

Responding to Children

When you ask children what ingredients they would add to the soup, they may suggest ingredients that are part of their culture. These may not be typical for your culture, but be sensitive to their ideas. Do not reject their ideas or make any gestures that might indicate their ideas are off-putting. You can say, “Yes, that’s a kind of food you use to cook in your home.”

Jan Thomas

The author of this book has a website that you can explore. It includes information about the author and her other works as well as downloadable activities.
<http://www.janthomasbooks.com>

Multiple Meanings

There are different aspects and interpretations of “mixing.” Here we introduce mixing as combining things. When we read the book *The Mixed-Up Truck*, we also start exploring mixing actions, such as stirring. Later we will talk about getting “mixed up” as in confused. You can also make connections to Unit 5, when the animals mixed up their beds in the book *Go Sleep in Your Own Bed!*



Before

ACTIVATE children’s knowledge of the word “wise” by acting out a scenario in which you wear or do something incorrectly. See the example below.

Brr! I am feeling chilly. I’m going to warm myself up by putting my sweater on [put it on your feet]. Hmm, why don’t I feel warmer? Was it wise of me to put my sweater on my feet? Did I make a good choice? Why not? [put the sweater on your head] Is this wise? [put the sweater on correctly] Is this wise? Why?

INTRODUCE the book. **INVITE** children to define the word “wise” and explore their thinking as they look at the cover. **ADD** “wise” to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language).

It’s time to read our book. The title is *Is That Wise, Pig?* by Jan Thomas. Let’s think more about this title: *Is That Wise, Pig?* There’s that word “wise” again. What do you think “wise” means?

Yes, being wise means thinking carefully about what you know and making a good choice. So, what might it mean when someone asks: Is that wise, Pig? Yes, someone is asking Pig if what he is doing makes sense. Let’s add “wise” to the list of words we are learning. Do you know any words that mean the same thing?

Do you think it’s wise that Pig is wearing a galosh, a rain boot, on his head? Sign “yes” [demonstrate] or “no” [demonstrate]. Who wants to share their thinking?

PROMPT children to think about what Pig is doing when asked, “Is that wise, Pig?” and sign “yes” or “no.”

As we read, every time someone asks, “Is that wise, Pig?” think about what Pig is doing. If you think Pig’s choice makes sense, sign “yes.” If you think Pig’s choice doesn’t make sense, sign “no.” Let’s read!

During

POINT to the characters talking and their speech bubbles. **PAUSE** after “Is that wise, Pig?” **ACKNOWLEDGE** children signing and discuss their thinking.

There is the question, readers: Is that wise, Pig? What do you think about his choice to put umbrellas into the soup? Is that a wise choice?

Many of us are signing “no.” Why shouldn’t Pig mix umbrellas into the soup?

EXAGGERATE your reaction after reading “Six galoshes!” **CLARIFY** what galoshes are.

What does Pig want to mix into the soup? Say “galoshes.” Let’s find the beats or syllables in that word: ga-losh-es. What are galoshes? Can you use the picture? Yes, galoshes are rain boots.

PAUSE after “Is that wise, Pig?” **ACKNOWLEDGE** children signing and discuss their thinking.

Let’s think about what Pig is doing. Do you think it is wise to mix galoshes into the soup? Why or why not?

PAUSE after “The umbrellas and galoshes were pretty wise, Pig.” **ASK** children why the cow says it is wise to have umbrellas and galoshes now.

Why is the cow saying it is wise to have umbrellas and galoshes now?

After

ASK children what wise ingredients they would mix into the soup.

The cow and mouse added some wise ingredients to the soup, ingredients that actually belong in soup. Do you recall what they were?

Yes, they added one onion, some tomatoes, some green beans.

If you were going to add some wise ingredients to their soup, what would you add?

Pretend to stir the soup! Mix it up!

Build Interest

SHOW children the toy mixture from Talk Time. **INVITE** them to make observations.

Here is our toy mixture from Talk Time. When we make a mixture, we put things together. What happened when we mixed these toys together? Has the mix of toys changed since Talk Time?

DEFINE “separate.” **ADD** the word to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language). **ASK** children to separate the toys from the toy mixture.

Separate means to take things apart. Do you think we could separate or unmix these toys?

Let’s add the word “separate” to the list of words we are learning. Do you know any words that mean the same thing?

Let’s try separating the toys now.

Build Understanding

MAKE another mixture together. **EXPLAIN** the process for mixing: Everyone chooses one item to add to the mixing bowl. **INTRODUCE** the Mixing Tool Collection Box.

I’ve brought some more materials for us to mix together [point].

Here’s a mixing bowl [point]. Think about one item you would like to add to the bowl. After we add our items, we will mix them together and make observations. We can use our mixing tools from our new Mixing Tool Collection Box [point] to mix the materials together. Who wants to go first?

ASK children to make a prediction about what will happen to the items when they get mixed together.

Now that we have added our items, let’s make a prediction. What do you think will happen after we mix them together?

INVITE children to mix and separate the toys. **USE** what you know about each child’s language skills to include and extend their participation.

- Gesture: Show me how you mix. Show me how you separate.
- Yes/No: Is this mixed? Is it separated? Did the items change?
- Either/Or: Is this mixed or separated? Did the items change or did they stay the same?
- Open-ended: What happened to the items? Did they change? Were we able to separate the items?

Build Experience

GIVE each partnership a mixing bowl and mixing tools. **INVITE** them to select their own items to mix together. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with a partner and make your own mixtures. I wonder what you will mix today.

REFLECT on the mixing activity by asking children to share their experience.

Today you tried mixing. Let’s discuss...

- What materials did you use? What happened? Did the items change?
- Were you able to separate your materials? What was easy? What was hard?

REVIEW the idea of a mixture.

We created more mixtures! We mixed toys together, but they didn’t change. We were able to unmix (or separate) them too!

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of “Mixing Toys” to the science journals (one per child).
- Create a Mixing Tool Collection Box. Include craft sticks, chopsticks, a whisk, and spoons of various sizes and materials.

Additional Materials

- Classroom toys (dinosaurs, teddy bear counters, chips, etc.)
- Three to four mixing bowls
- Unit Chart: “Words We Are Learning”
- Science journals
- Writing tools



Remember to Save

Mixing Tool Collection Box, to be used throughout the unit.



Build Background Knowledge

Spend time talking about mixing. Invite children to share personal experiences and understandings of when they have tried mixing.

Stretch Their Thinking

Invite children to choose other classroom materials to mix and compare the experiences.



Listen/ Look For

- What materials do children choose?
- How do children explain what happens when they mix?

Words We Are Learning

separate: to take things apart

Did You Know?

The phrase “scientific method” suggests that there is just one method that proceeds in a set order, standards now encourage the use of the phrase, “science practices” to refer to the many ways in which children and grownup scientists do science. Through this investigation and others during this unit, you will be guiding children to engage in science practices. Children will do the actions that scientists do, as they observe, ask questions, make predictions, experiment, explore, think, and share results.



Supporting Multilingual Learners

Explicitly review the words “apart” and “together” to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children’s home language (use an online translation tool). This will support their comprehension of the thematic content.

Greeting Time

Children sing a version of the song about swishing.

Creative Arts: Music

REVIEW stirring. **ASK** children how else we can mix.

Scientists, we know there are different ways to mix! Can you show how you stir [show picture card] a mixture? How else can we mix things together?

MODEL and **INVITE** children to do a swishing action. Move a whisk quickly back and forth.

Another way to mix is swishing! When you swish, you move a mixing tool like this whisk [show] quickly back and forth like this [demonstrate]. Can you pretend to swish a mixture [show picture card]?

INVITE children to do a swishing action and sing "The Mixing Song" with a faster tempo.

Keep swishing as we sing "The Mixing Song" together!

Swish, swish, swish it up
[move your hand quickly back and forth]

All the way through!

We are all scientists,
[point to yourself]

I wonder what we'll do!
[Turn both hands up]

Now let's sing the words a bit more quickly to match our swishing action!

Make & Prepare

- Download and print a picture card for the word "swish."
- Bring in a whisk to demonstrate swishing. Use the whisk from the Mixing Tool Collection Box.

Additional Materials

- *Blueprint Songbook*
- "Stir" picture card

Movement Time

Children do a swishing action with different body parts.

Physical Development: Gross Motor Skills

THINK ALOUD about swishing other body parts quickly back and forth.

Swishing is one way we can mix things together. I wonder what other body parts we could move quickly back and forth? Let's stand up and try!

MODEL and **GUIDE** children to quickly swish their shoulders.

When I swish my shoulders, I move them back and forth quickly like this [demonstrate]! Can you swish your shoulders?

ASK children to suggest other body parts to try (i.e. hips, knees, etc.).

What other body parts can we swish quickly back and forth?

Can you swish your hips like this [demonstrate]?

Can we squish our knees?

Executive Function

When children are tired, hungry or feeling sick, their executive function skills can be sapped. Be sensitive to these times and manage your own expectations.

Use the Calm Corner

Are children excited after doing their swishing actions? Select an activity from the Calm Corner such as a Mindful Moment to help them focus and get ready for the next activity.

Talk Time

Children learn about a scientist and science labs.

Science: Scientific Inquiry and Practices

RESTATE that scientists make mixtures. **INTRODUCE** Scientist Ahmed.

Swishing is one way to mix things together. Many scientists experiment with making mixtures.

This scientist made mixtures [show photo]. His name is Ahmed Zewail. Can you say hello to Scientist Ahmed?

ASK children where scientists work. **SHOW** pictures of science labs. **ASK** children what they notice.

Where do you think Scientist Ahmed made his mixtures? Where do some scientists work?

Some scientists make mixtures in a science lab. Take a look at these pictures of science labs. What do you notice?

DISCUSS the tools and equipment that the scientists are using in the lab.

What science tools do you see? How are the scientists using them?

What are the scientists wearing? Why?

Just like Scientist Ahmed in his science lab, we will be making more mixtures!

Make & Prepare

- Download and print a photo of Ahmed Zewail.
- Download and print images of science labs.

Highlighting Real People

Help children connect to the content of this unit by featuring real chemists. We are highlighting Ahmed Hassan Zewail (1946-2016). He was awarded the 1999 Nobel Prize in Chemistry as the first Egyptian to win a Nobel in a scientific field. Feel free to choose someone who may resonate more with your children.

Building Background

We will create a science lab dramatic play. Talk Time helps build children's knowledge about how a science lab might look and be equipped. It provides a springboard for pretending to work like scientists in a lab.

Before

HOLD open the book *Is that Wise, Pig?* so children can see both the front and back cover at the same time. **DISCUSS** the speech bubble.

Let's take a look at the front and back covers of our book, *Is That Wise, Pig?* Here is the title of the book [point]. What do you notice around the words [trace the speech bubble]?

Yes! There is a round shape. This is called a speech bubble! Do you know what a speech bubble is?

EXPLAIN that speech bubbles tell what a character is saying while you show children the covers of the book.

A speech bubble is a drawing in a book that tells us who is talking. Inside the bubble, the author writes what a character is saying. Who is saying, "Is that wise, pig?" How do you know?

Yes, the cow [point]! The speech bubble is coming from the cow's mouth. We can tell because the bubble is pointing at the cow.

POINT to the speech bubble on the back cover.

Who is this speech bubble pointing at? How do you know?

Yes, the mouse is talking. We can tell because the bubble is pointing at him [point]. He is saying, "Pig wouldn't do anything unwise would he?"

REFER to Movement Time. **HIGHLIGHT** something one of your children said.

Earlier today, we practiced swishing different parts of our bodies. [name] said "I can swish my feet." Watch as I draw [child] saying those words. I will use a speech bubble.

During

DRAW a picture of the child you spoke about. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

Here is a picture of [child]. She is talking about what we did in Movement Time. What can I draw to show it is her? Her hair? Clothes? I will draw a speech bubble and add the words she said inside.

Suggested message: "I can swish my feet."

PAUSE to focus on writing structure (speech bubbles tell who is talking).

I wrote what [child] said. But what can I draw around it to show that she is talking? Yes! A speech bubble. I will draw a round shape around the words she said. Then I will make the drawing come to a point near her mouth. This shows she is talking.

INVITE children to reread the message with you.

After

HOLD UP the speech bubble cut out. **INVITE** children to hold the speech bubble over their head and say something related to their day or their interests.

Here is a speech bubble! When we see a speech bubble in a book, it contains the words a character is saying. Think about something you want to say. It can be about something you like or something we did in Gathering Time. Let's pass the speech bubble around and hold it above our head like this [demonstrate]. We will imagine what you say is written in the speech bubble.

SUMMARIZE how speech bubbles are used. **SHARE** a few things children said when they held the speech bubble.

Today we learned what a speech bubble is. When we see a speech bubble in a book, we know who is talking. We also know that the words inside the speech bubble are the words the character is saying. We passed around a speech bubble and shared something that could be written inside of it. Some of your words were...

REREAD the message one more time.

[Transition] **INVITE** children to think about how they would "teach" the idea of a speech bubble to someone at home.

When you go home, teach someone in your family what a speech bubble is. Let's rehearse what you might say and do. Tell your partner what it means when you see a speech bubble.



Make & Prepare

- Make a large blank speech bubble out of construction paper or cardstock.

Additional Material

- The book *Is That Wise, Pig?*

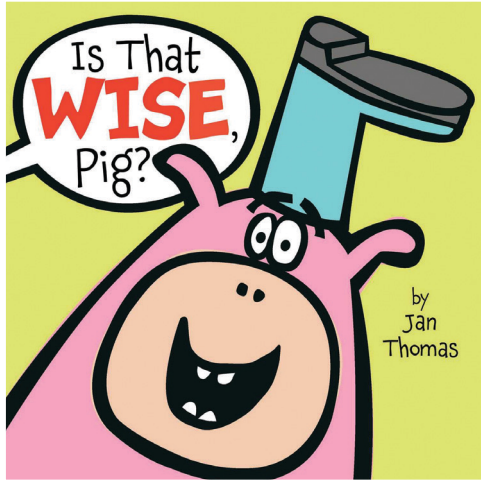
Writing Development

Message Time Plus provides you an opportunity to model writing. What do you notice about children's own writing? Are they beginning to use letters and letter strings? If so, support their continued development. Generate lists of words that begin with the same sounds. Draw attention to initial sounds and beginning letters in books, messages and other print. Encourage children to describe what they want to write and then help them to listen to the beginning sounds in the words before they start writing



Keep it Going

- Add the speech bubble to the library center. Children can continue to act out what the characters in books are saying or use it to recognize other speech bubbles when they see them.
- Join children at the library center. Add books that contain speech bubbles to the center. While reading with children, encourage children to notice the speech bubbles throughout the book. Can they point to it? Read it to children and invite them to say the words with the appropriate expression.



Material

- Anchor Chart: “Feelings”

Reading with Expression

In this lesson we think about how the characters look and feel. We then ask children to imagine how they would sound when they are talking. The speech bubbles in this book are an especially fun way to involve children in reading the characters' words with appropriate expression.

Identifying Emotions

We often work with children on identifying how characters feel in books based on how they look and what they say. This supports them in learning to identify other people's feelings in real life.

Before

RECAP how the title relates to the book. **REVIEW** what speech bubbles are.

Do you recall what the characters in this book are making?

Yes, they are making soup. But what happens when Pig suggests mixing something into the soup that is not food? What do the cow and mouse say?

Yes, they say, “Is that wise, Pig?” That question is the title of the book. Who can come up and point to the title of the book on the cover?

Do you remember what we call the shape around the title? Yes, a speech bubble. What is a speech bubble?

Yes, a speech bubble shows us what the characters are saying.

INVITE children to join in asking the repeating question: **Is that wise, Pig?** **ENCOURAGE** them to try to look and sound like the characters as they are talking.

How would you like to join in reading some of the speech bubbles in this book today? When it's time for the question, “Is that wise, Pig?” I will point to you.

When we ask that question with the cow and mouse, let's notice how they look and imagine how they sound. We can match our expressions and our voices to theirs when we say their words.

During

PAUSE after “I do!” **ASK** children how the animals feel. **INVITE** them to use a happy expression and voice to say their words.

The animals are starting to make their soup. Look at their faces. How do you think they are feeling? You can use the “Feelings” chart to help you. How do you know? Can you make a happy expression like theirs? How do you think their voices sound when they say, “I do!” Let's say their words in a happy voice: I do!

PAUSE after “Three umbrellas? In the soup?” **ASK** children how the cow and mouse feel.

Look at the cow and mouse in this picture. What do you notice about their faces? How do you think they feel about Pig's suggestion to mix umbrellas into the soup? Why?

Maybe they feel worried because it doesn't make sense to put umbrellas into the soup.

TURN the page. **MODEL** and **INVITE** children to shrug and say the refrain in a worried voice.

I'm going to lift my eyebrows and frown like the cow and mouse [demonstrate]. I can even shrug my shoulders and throw my hands up like they are doing [demonstrate]. Can you make a worried expression, shrug your shoulders, and say, “Is that wise, Pig?”

PAUSE after “Six galoshes? In the soup?” **PROMPT** children to use a worried expression and voice to ask the question on the next page.

The cow and mouse were smiling as they mixed more vegetables into the soup, but now how do they look? Can you look and sound worried, as you ask the question: Is that wise, Pig?

PAUSE after “Pretty wise, huh?” **ASK** how the cow and mouse feel. **MODEL** and **PROMPT** children to use an excited expression and voice to say, “Yes!!!”

How do the cow and mouse look here? They have wide eyes and big smiles like this. Can you make an excited expression, too? Why do you think they feel excited? They are glad Pig made a wise choice this time. So, when they reply “yes,” how might their voices sound? Let's all look and sound excited, as we say their words: “Yes!!!”

PAUSE after “I asked ten hungry friends to join us!” **PROMPT** children to use a worried expression and voice to ask the question on the next page.

Look at the cow and mouse. Think about how their voices will sound. Let's all ask the question...

After

INVITE children to pretend to eat the soup.

Look at all the pigs! Pretend to eat the soup with them. Grab your spoon and dig in!

Build Interest

DISCUSS previous toy mixing experiences. **REFER** to children’s science journals.

We have been mixing together some classroom toys. We mixed some...

What happened when we mixed those items together?

The toys did not change. We could unmix or separate them [point to the word on the Unit Chart: “Words We Are Learning”].

Build Understanding

MAKE another mixture together. **SHOW** the materials. **EXPLAIN** the process for mixing: **Everyone chooses one item to add to the mixing bowl of water.**

Today we are going to see what happens when we mix some toys in water. I’ve brought some more materials for us to mix together [point].

Here’s our mixing bowl. I’ll pour some water into it. Think about one item you would like to add to the bowl. What do you think will happen when you add it to the water? Will the toy change? Will the water change?

INVITE children to mix. **ASK** children to describe their observations. **USE** some of the following questions to guide the conversation:

- What happened to the items?
- Did the items change?
- Are they different now?
- Were we able to unmix or separate the items?

Build Experience

GIVE each partnership a mixing bowl with water in it and mixing tools. **INVITE** them to select their own items to mix together. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own mixtures in water.

REFLECT on mixing with water by asking children to share their experience.

Today you mixed with water. Let’s discuss...

- What materials did you use?
- What happened?
- Did the items change?
- Were you able to unmix or separate your materials?

REVIEW what a mixture is.

Mixtures are made when you mix items together. Today we mixed toys and water together. We were able to unmix or separate them too!

DISTRIBUTE science journals. **INVITE** children to record their thinking.

This Small Group can also be done at the sensory (water) table.



Make & Prepare

- Download, print, and add a copy of “Mixing Water and Toys” to children’s science journals (one per child).

Additional Materials

- Classroom toys that can be submerged in water (dinosaurs, teddy bear counters, chips, etc.)
- Three to five mixing bowls
- Large pitcher of water
- Mixing Tool Collection Box
- Unit Chart: “Words We Are Learning”
- Science journals
- Writing tools

Build Background Knowledge

Invite children to talk about what they know about water. What have they mixed in water?



Stretch Their Thinking

Invite children to choose other classroom materials to mix with water and compare the experiences.

Listen/ Look For

- What do children predict will happen?
- How do children describe their experience mixing with water?

Be Prepared

Many of the mixing activities in this unit require preparation. The more prepared and organized you are before children join you, the less wait time they will have.



Supporting Multilingual Learners

Assess whether multilingual learners recorded in their journals any observations that were not verbally shared with the group. Offer to help describe their drawings and recordings.

Document Their Learning

Take photos of children experimenting. These will be useful for helping them recall all that they’ve done and to make comparisons between experiments.

Supporting Language Development

Bring attention to the prefix “un-” in the word unmix. Let children know it means “not.” Explicitly stating the meaning of prefixes and suffixes allows all children to notice these language forms and patterns in the English language.

Greeting Time

Children sing a version of the song about shaking.

Creative Arts: Music

SHOW a container and cubes. **ASK** how we could mix the cubes.

Scientists, look at this container. What do you see inside?

Yes, there are yellow and red cubes. How could we mix the cubes together inside this container?

INTRODUCE shaking as another way to mix objects.

Yes, we can stir them or swish them together. Or we can shake them.

INVITE a child to shake the container. **PASS** around several containers for children to shake. Then **COLLECT** them.

Let's pass these containers around so you each get a turn to shake the mixture.

MODEL and **INVITE** children to do a shaking action and sing "The Mixing Song."

Can you pretend to shake a container? Yes, when you shake, you move your hands quickly [show picture card]. Keep shaking as we sing "The Mixing Song"!

Shake, shake, shake it up [shake your hands as if holding the container]

All the way through!

We are all scientists, [point to yourself]

I wonder what we'll do!
[turn both hands up]

Movement Time

Children alternate shaking opposite hands and feet.

Physical Development: Gross Motor Skills

MODEL and **INVITE** children to shake one hand at a time. **REPEAT** with one foot and the other.

Shaking is one way we can mix things together. What body parts did we shake in our song?

Can you shake one hand like this [demonstrate]? Now shake the other hand.

Can you shake one foot like this [demonstrate]? Now shake the other foot.

What other body parts can we shake?

GUIDE children to shake one hand and one foot, and then switch to the other hand and foot.

Try shaking one hand and one foot.

Switch: Shake the other hand and the other foot!

ENCOURAGE children to shake their whole bodies. Then **PROMPT** them to pause and breathe.

Shake both hands and both feet! Shake your whole body!

And slow down your shaking; come back down to sit. Take a deep breath in and out.

Talk Time

Children review ways to calm down when they feel upset.

Social Emotional: Self-Awareness and Self-Concept

INVITE children to reflect on and share how they feel.

How did shaking your whole body make you feel? Is your feeling on the "Feelings" chart?

Some of us feel happy, or silly, or tired. There are lots of feelings.

USE Sayeh, the social emotional puppet, to tell a story about feeling upset (i.e. she was shaking her body and fell down).

Sayeh is here to talk about how she felt when she tried shaking her body.

How does Sayeh feel? What does it mean to feel upset?

REFER to the Anchor Chart: "Power of 3" and locate "Calm Down." in the section titled "Take Care of Ourselves."

When we feel upset, we may be sad or hurt. We also could be angry or frustrated. Being upset is a big feeling. But when we are upset, we can take care of ourselves. We can calm down [point].

USE the puppet to ask children how they calm themselves down.

Who can tell Sayeh: How do you take care of yourself when you are upset? How do you calm yourself down?

We know how to take care of ourselves and calm down. That's the Power of 3 [sign]!

Make & Prepare

- Download and print a picture card for the word "shake."
- Several clear, empty containers
- Two distinct manipulatives (such as red cubes and yellow cubes)

**Additional Material**

- *Blueprint Songbook*

**Using Your Photos**

It's good to have photos of children, their families or recent past classroom events around your room. However, remember to embrace blank space on your walls as well. Every inch should not be covered.

Materials

- Anchor Chart: "Feelings"
- Anchor Chart: "Power of 3"
- Sayeh and Elijah, the social emotional puppets

Executive Function

Developing children's executive function is a priority in early childhood classrooms. One way to do that is to give children choices. For example, children learn different ways to soothe themselves when they are upset, and they can choose which method to use when they need it.

Before

CONNECT to the read aloud *Is That Wise, Pig?* **FOCUS** on the vocabulary word “wise.”

When we read the book *Is That Wise, Pig?* [show] we paused to think about the word “wise” [point to the word on the chart.] The word “wise” is in the title of the book, and we heard the characters say the word many times. Can you say “wise?” Let’s stand up and count the beats or syllables: wise [touch head]. The word “wise” has one beat.

SHOW the pictures and **READ** the marked pages. **INVITE** children to make the “I hear” sign when they hear the word wise.

Look at the pictures and listen for the word “wise,” as I read a few pages from the book. Make the “I hear” sign [demonstrate] when you hear it!

What does the word “wise” mean to you?

Yes, being wise means using what you know to make good choices.

LOOK BACK on pig’s actions and ask if they were “wise.”

Was pig wise in thinking umbrellas belong in soup? Mouse and Cow did not think so. Do you?

Let’s keep thinking about the word “wise!” Look for it in the message today.

During

DRAW a picture of three umbrellas. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

I will draw the three umbrellas Pig wanted to add to the soup. Should I draw them open or closed?

Suggested message: “Is it wise to add umbrellas?”

PAUSE to focus on vocabulary (the word “wise”).

I want to write the word that means thinking carefully about what you know and making a good choice. What word do I want to use? [encourage children to recall the word “wise”] Yes, “wise” is another word for making a good choice.

FINISH writing the message. Then **INVITE** children to reread the message with you.

After

INVITE a volunteer to find the word “wise” in the message. **DRAW** a box around it to emphasize the concept of a word. **ASK** children to define the word.

Who would like to come point to the word “wise” in the message? How do you know that is the word “wise?” What does it mean?

PLAY a game. **SHOW** different ingredients for snack. **INVITE** children to sign “yes” if they think it is a “wise” ingredient and sign “no” if it is not.

Let’s play a game. What if we want to mix up a snack here at school? I’m going to show you an ingredient to mix in. If you think it is a wise ingredient, sign “yes” [demonstrate]. If you don’t think it is wise to put it in the snack, sign “no” [demonstrate].

REVIEW the meaning of the word “wise” again.

Today we learned the word “wise.” Being wise means using what you know to make good choices. We thought about wise ingredients for a snack mix. How about we make this snack today with all the wise ingredients you chose!

REREAD the message one more time.

[Transition] **INVITE** children to think about how they would “teach” the vocabulary word to someone at home.

When you go home, why don’t you teach someone in your family what the word “wise” means? Let’s rehearse what you might say and do. Tell your partner what it means to be wise.



Make & Prepare

- Gather together some ingredients to make a snack mix (e.g. cereal, raisins, pretzels, crackers); also include some ingredients that would clearly not belong (e.g. socks, markers).
- Have the book *Is That Wise, Pig?* ready. Mark the page that begins “Who wants to help me make soup?” and subsequent pages until you get to “Is that wise, Pig?” with sticky notes.
- Review the ASL signs for “I hear,” “yes,” and “no” on the *Blueprint* website.

Additional Material

- Unit Chart: “Words We Are Learning”

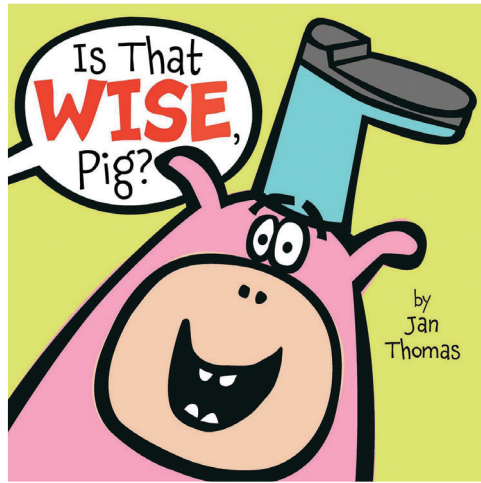
Interacting with Children

When introducing new vocabulary, connect the new word to a familiar word or familiar idea. For example, in this lesson we explain that the word wise means to make good choices. Throughout the day take notice of children making good choices. If you notice a child making a wise decision, use the new vocabulary word, wise, to describe their good choice. For example, “Tony, that was wise of you to walk to your cubby instead of run.” Building connections between words cements children’s comprehension. When working with children individually, be sure to continue to do this.



Keep It Going

- Join children at the library center. Refer to the book *The Three Little Pigs* from Unit 4. Talk about the wise choices those pigs made. Ask, “Can anyone think back to our unit on construction? We read about three little pigs who built their houses out of straw, sticks, and bricks. Which one would you say was wise? What makes that choice wise?”



Material

- Number line

Counting Book Challenge

Children typically find it easier to count items in a picture book when they are arranged in a straight line, as they are on the “four tomatoes” page of this read aloud. However, many of the foods and other items on several other pages (e.g. the Brussels sprouts page and the 10 hungry friends page) are not in a line. Support children in counting these items, for example, by clearly pointing to each of them.

Extending Number Sense

This is a counting book. In this lesson, we count the number of objects for each number one through 10. However, you can work on counting items in the picture with other books, even if they are not counting books. For instance, you can open to a page and ask children to count how many there are of a particular item. Another idea is to ask children to find all representations of a certain number in the picture. For example, do you see two of anything in this picture?

Responding to Children

Are children able to accurately count to 10? If so, have them practice counting to 15. If not, give them more practice with number songs up to 10.



Before

ASK children to name some ingredients from the book.

We have been reading this silly book about mixing. Can you read the title with me: *Is That Wise, Pig?* Do you recall what happens in this book? What ingredients do they use?

STATE that the words tell and the pictures show how many of each ingredient there are.

When we were reading, did you realize that this is a counting book? How could you tell?

Jan Thomas is both the author and the illustrator. So, in the words she writes how many, and in the pictures she draws how many.

ENCOURAGE children to listen for the number words. **SAY** that we will count the ingredients. **PROMPT** children to count one through 10. **REFER** to the number line.

As we reread this book, listen for the number words. When we hear a number word, then we can look at the picture and count the ingredients. Let's warm up our brains by counting to 10 together. We can use our number line to guide us.

During

PAUSE after “Here are two cabbages!” **GUIDE** children to count the onion and cabbages.

Readers, what number words did you hear? The words say there is one onion. Let's count the onion in the picture: one. How many cabbages are there? Let's count them: one, two.

PAUSE after “Three umbrellas!” **POINT** to each umbrella. **PROMPT** children to count one through three. **ASK** them what number will come next.

Let's count the umbrellas: one, two, three. This is a counting book. So far, we have counted: one, two, three. What number do you think will come next? How do you know?

PAUSE after “Here are five potatoes.” **INVITE** a volunteer to come up and point to the vegetables in the pictures. **GUIDE** children to chorally count one through four and one through five.

There are more number words on this page. Who would like to come up and point to each tomato in the picture, as we all count them? Who can come point to each potato?

PAUSE after “Here are eight Brussels sprouts.” **MODEL** and **GUIDE** children to count out and hold up seven fingers and then one more to make eight. **ASK** which number comes next.

How many carrots are there? Let's count out and hold up seven fingers. Count along: one, two, three, four, five, six, seven. Keep up your seven fingers. How many Brussels sprouts are there? Well, we already are holding up seven fingers. Let's count on from seven. Eight. Now we are holding up eight fingers!

Which number will come next? When you hear the next number, hold up the next finger...

MODEL and **PROMPT** children to hold up one more finger to make nine and then 10.

After

INVITE children to pretend to scoop 10 servings of soup. **GUIDE** them to count one through 10.

It was fun to count the ingredients along with the animals today. Let's pretend we are eating the soup at the end of the book, too. What tool are the pigs using to scoop up the soup?

Let's grab a pretend spoon. Scoop up one spoonful of soup. That's one. Scoop another spoonful. That's two. Let's keep counting. Scoop: three...four...five...six...seven...eight...nine...10!

Build Interest

CONNECT to previous mixing experiences.

Scientists, we have been working like Scientist Ahmed [show picture] investigating mixtures. We've mixed items from our classroom together, and we've mixed them with water. I wonder what will happen when we mix other things in water.

SHOW salt. **INVITE** them to share what they know about salt.

Let's use something that might be considered a "wise" ingredient when making soup: salt [show]. Here is some salt. Have you used salt before? What do you know about it?

Yes, salt is used for cooking and to season our food.

GIVE children time to explore the salt with their senses (but no tasting) and magnifying glasses. **INVITE** them to make predictions about what might happen when they mix salt and water.

What do you notice about the salt? What do you predict will happen when we mix water and salt together?

RESTATE children's predictions.

We are going to mix water and salt together. We predict...

COLLECT the cups of salt for later in the lesson.

Build Understanding

WORK together to make a salt and water mixture: add approximately one teaspoon of salt to the cup/bowl of water. **MAKE** observations, stir, and observe the mixture again. **REFER** to the Anchor Chart: "We Can Describe." **SUPPORT** the growth of children's descriptive vocabulary by incorporating words such as dry, wet, white, clear, smelly, grainy. **ENCOURAGE** multilingual learners to share descriptive words from their home language.

Let's mix some salt and water together and observe what happens. I'll pour some water into a bowl. Who wants to add a teaspoon of salt? Now let's stir the salt to see what happens.

- What is happening? What do you observe?
- How is this mixture different from the one we made with the toys and water?
- Why do you think the salt changes in the water but the toys did not?

Build Experience

GIVE each partnership a mixing bowl/cup of water and mixing tools. **RETURN** the cup of salt to the partners. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own mixtures.

USE what you know about each child's language skills to include and extend their participation.

- Gesture: Show me how you mix. Hmm, does that look [descriptive word]?
- Yes/No: Did the salt change? Can you separate the salt from the water?
- Either/Or: Did the salt change, or did it stay the same? Can you separate the salt from the water or not?
- Open-ended: What happened when you mixed the salt and water together? What changed? How would you describe your mixture? Were you able to separate the salt from the water? Why or why not? What questions do you have?

REFLECT on the mixing experience.

Today you mixed water and salt. Let's discuss...

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Water and Salt" to children's science journals (one per child).
- One small cup of salt (approximately one tablespoon) per partnership.
- Cover the table with newspaper or a reusable tablecloth for easy clean up.

Additional Materials

- Photo of Scientist Ahmed
- One bowl/cup per partnership
- Large pitcher of water
- Measuring spoon
- Mixing Tool Collection Box
- Magnifying glasses (one per child)
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools

Build Background Knowledge

Ask children to think about salt. What foods do they add salt to?

Stretch Their Thinking

Invite children to think of other substances they want to mix in water.

Listen/ Look For

- How do children work as they mix?
- How do they describe the mixture?
- What questions do they ask?



Did You Know?

When you mix two or more substances together you may get a solution. That's the technical term for successfully mixing together a solvent (a solid substance like sugar or salt) into a liquid (such as water). When you create a solution, you can no longer see the solvent. There has been a chemical change. A solution is a type of mixture.



Scaffolding Children

In this lesson, we ask children to make predictions before they mix salt and water. This scaffolds children's learning by preparing their expectations.

Vocabulary Development

Continue to add new vocabulary to the Anchor Chart: "We Can Describe" for children's reference. Add words, for example, that describe the visual observations children make. Encourage multilingual learners to share descriptive words from their home language.

Greeting Time

Children sing with partners and choose the action.

Creative Arts: Music

ASK children to recall the three mixing actions from the song. **SHOW** picture cards that match each action. **INVITE** a child to show how to stir with a spoon, swish with a whisk, and shake a container.

Scientists, we know there are different ways to mix things together! We have been singing and acting out our mixing song. What are some mixing actions we know?

Yes, we can stir. Who can remind us how to stir with a spoon [show card]? Let's all try it.

Yes, we can swish. Who can remind us how to swish quickly back and forth [show card]? Let's all try it.

Yes, we can shake. Who can remind us how to shake a pretend container by moving it quickly [show card]? Let's all try it.

INVITE children to meet with a partner, choose an action, and sing it with each other.

Let's sing with partners today. Face your partner and choose which action you want to do. Ready?

Make & Prepare

- Bring a spoon, a whisk, and a bottle.

Additional Materials

- *Blueprint Songbook*
- Picture cards for stir, swish, and shake

**Movement Time**

Children do different actions at the same time.

Physical Development: Gross Motor Skills

RECALL doing mixing actions with different body parts. **SUGGEST** mixing two actions.

We just sang about different mixing actions. We also have tried stirring, swishing, and shaking different parts of our bodies. What if we try to do one action with one body part, and another action with another body part—at the same time? Let's mix two actions!

MODEL and **GUIDE** children to shake their hands, and swish their hips at the same time.

Start by shaking your hands. Keep shaking your hands, but now swish your hips from side to side at the same time. We are mixing hands shaking and hips swishing! Phew, let's pause.

MODEL and **GUIDE** children to swish their shoulders and stir their hips at the same time.

Do you want to try mixing two other actions? Let's swish our shoulders. Keep swishing your shoulders, and now stir your hips all the way around.

INVITE children to suggest other actions to do at the same time.

Who wants to suggest another action? Which body part will we move? Let's all try that. Now let's mix it with another movement. What else should we do?

Boost Brain Power

Children are “mixing” movements. They do different movements with different body parts at the same time. Practicing these types of simultaneous actions can boost brain power! The coordination requires sharp focus and concentration. Try combining other movements in this way to offer children mental breaks or to jump start their creative thinking.

Talk Time

Children launch the science lab dramatic play center.

Creative Arts: Dramatic and Performance Art

CONNECT to science labs.

It's fun to mix movements. Mixing is something that scientists like Scientist Ahmed [show photo] do at their job. Scientists often work in science labs like these [show photos].

INVITE children to brainstorm what they need in order to set up a science lab in the dramatic play center. **LIST** their ideas.

We are scientists! How would you like to create a science lab at our dramatic play center?

- What should we call it?
- What are some items we might need to create a science lab here in our classroom?
- What other supplies could we use?
- What signs will we need?

SHOW some items. **DISCUSS** what children might do at the new dramatic play center.

- How can you use these items?
- What jobs might you pretend to do at the science lab?
- How might you work with each other?

I can't wait to see all of you scientists at work in your lab!

Make & Prepare

- Make space for the new dramatic play center. Collect some items to launch it but leave room for children to co-design it. See Centers: “Dramatic Play” (page 15) for suggestions.

Additional Materials

- Photo of Scientist Ahmed
- Photos of science labs

Before

CONNECT to the book *Is That Wise, Pig?* **ASK** children for examples of counting in the day. Then **STATE** that you will teach them a new way to keep track of how many as they count.

Is That Wise, Pig? is a counting book [show]. Can you think of a time when you have counted something in the classroom?

Today I want to show you a new way to keep track of how many you have as you count.

PLACE one mixing tool in front of children. **EXPLAIN** that you can show the quantity by making a tally mark for each object. **BEGIN** a Unit Chart: “Tally Marks.” **DRAW** one tally mark on a chart. **WRITE** the numeral next to it. **REFER** to the number line.

I want to count how many mixing tools I have. Take a look. How many are there [point]? I can show this number by making a mark for each tool. One. This is a tally mark [point]. Can you say “tally mark”?

I made one tally mark to show the one mixing tool. I’ll write the number one next to the one tally mark. I can look at the number line to guide me.

Let’s do it again and make more tally marks!

CONTINUE showing mixing tools and creating tally marks for each quantity (two to four). **WRITE** the numeral next to each set of tally marks. Then **EXPLAIN** how five tally marks look.

How many mixing tools should I show next? Yes! Five [hold up five fingers]. Something special happens when you want to make five tally marks. Watch! One, two, three, four, then the line for five goes across! Now we know what tally marks look like for numbers one to five.

Let’s write a title for this chart.

During

DISPLAY the tally mark chart.

Suggested Title: “Tally Marks”

PAUSE to focus on phonological awareness (/t/ in the word “Tally”).

I just drew five tally marks. Now I want to write the word “Tally.” Say that with me: tally. What sound do you hear at the beginning of the word “tally?” /t/. What letter makes the /t/ sound? Yes, the *letter t* makes the /t/ sound. When I write the uppercase *letter T*, I start at the top and drop down. Then I make a bridge. Now you try writing it with your finger in the air.

FINISH writing the title. Then **INVITE** children to reread the title with you.

After

SHOW some mixing tools. **INVITE** children to count the tools and “draw” tally marks on the palm of their hand to represent the quantity. **REPEAT** several times.

Let’s practice counting and showing the number with tally marks. I’ll place some mixing tools out. You count and then draw tally marks with your finger in the palm of your hand to show how many.

How many tools are there? Two! Draw two tally marks in the palm of your hand. Who wants to come draw them on the board?

SUMMARIZE learning about tally marks.

Today we learned about tally marks. You can draw tally marks to help you keep track when you are counting. One mark stands for one item. When you get to five, go across with a line!

REREAD the message one more time.

[Transition] **EXPLAIN** that the Unit Chart: “Tally Marks” will be added to the math center.

Let’s add the tally mark chart to the math center. You can draw tally marks to keep track of items as you count by drawing one tally mark for each item.

Tally Marks



Note: The message should be written on chart paper, so you can keep it as a reference tool.

Make & Prepare

- Collect five mixing tools (e.g. spoons)

Additional Materials

- The book *Is that Wise, Pig?*
- Number line
- Chart paper
- Markers

Vary the Lesson

Instead of writing tally marks on their hands, pass dry-erase boards and markers or clipboards, paper, and pencils to children. Have them make tally marks for the quantities of mixing tools you show. Or give them craft sticks or toothpicks to use as tally marks.



Tally Marks

Tally marks are a useful tool for helping children learn how to count by five. If children are ready for it, add tally marks six through 10 to your chart.



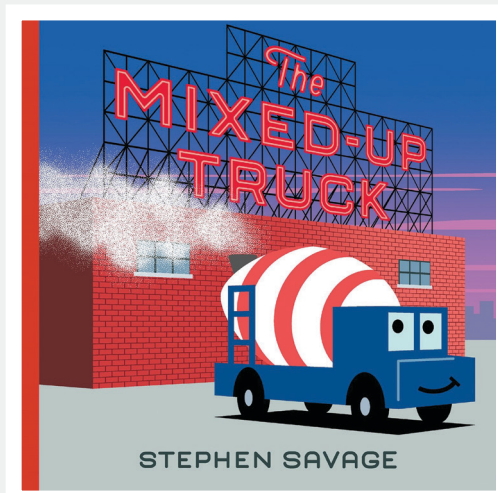
Growing Mathematicians

Modeling with mathematics is one of the key practices in learning and doing math. Tally marks represent abstract quantities because they are not objects children can hold. But they may be a bridge for some learners between verbally counting the number of a set of concrete objects they can touch and using numerals because the tally marks can still be counted to check.



Keep It Going

- While outside, encourage children to count parts of the playground. How many slides are there? How many monkey bars are there? Invite children to use chalk to draw tally marks to show the number.



Make & Prepare

- Review the ASL sign for “I predict” on the *Blueprint* website.

Additional Materials

- The book *Is That Wise, Pig?*
- Anchor Chart: “Readers Can Say”
- Unit Chart: “Words We Are Learning”

Words We Are Learning

presto: a word to announce that something has been done as if by magic

Connections to Other Units

In Unit 3 children learned about different trucks they might observe in their local community. In Unit 4 they took a closer look at construction vehicles, such as the ones in this book.

Previewing Bubbles

We will take a deeper dive into mixing and making bubble mixtures in Week 2 of this unit.

Keep It Going

- Encourage children to find natural materials and mix them together.



Before

CONNECT to *Is That Wise, Pig?*

We have been reading about animals that mix together ingredients for soup [show *Is That Wise, Pig?*]. Today we are going to read another book about mixing.

SHOW the cover of *The Mixed-Up Truck*. ASK what kind of truck it is.

This book is called *The Mixed-Up Truck*, both written and illustrated by Stephen Savage. Look at the truck on the cover. What kind of truck is this? How do you know?

Yes, it is a cement truck, a vehicle at a construction site. This truck’s job is to mix cement.

MODEL and INVITE children to spin both their arms like a cement mixer.

The drum [point] is the part of the cement truck that spins to mix cement powder and water together. Can you spin your arms around like a cement mixer [demonstrate]? When the cement powder and water are all mixed, the mixture can be poured out.

Let’s read to find out what the mixed-up truck mixes together.

During

PAUSE after the first “...presto!” **EXPLAIN** what “presto” means. **ADD** “presto” to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language). **MODEL** and **PROMPT** children to act out mixing like the truck and then say, “Presto!”

Can you say “presto”? Do you know what it means? “Presto” is a word we can say when something is all done, as if by magic. Instead of saying, “Here it is!” or “It’s ready!” we can say “Presto!” Let’s add “presto” to the list of words we are learning. Do you know any words that mean the same thing?

Each time the truck is mixing up powder and water, let’s spin our arms like we are mixing too. Then join me in saying, “Presto!” Let’s try it!

PAUSE before turning the page. **POINT** out the sign that says “Flour.” **INVITE** children to make a prediction. **PROMPT** them to use the sign and sentence stem, “I predict.”

The truck mixed a white powder with water. It got the powder from this building. The sign says “Flour.” Do you think when it mixes flour and water, it will make cement? What do you think will happen next? If you would like to share your prediction, sign “I predict” [demonstrate]. Say, “I predict...”

PAUSE after reading the page that shows the sign: “Sugar.” **POINT** it out on the sign. **INVITE** children to make a prediction. **PROMPT** them to use the sign and sentence stem, “I predict.”

The truck mixed another white powder with water. It got the powder from this building. The sign says “Sugar.” Do you think when it mixes sugar and water, it will make cement? What do you think will happen next? If you would like to share your prediction, sign “I predict.” Say, “I predict...”

PAUSE after reading the page that shows the sign “Cement.” **POINT** it out on the sign. **ASK** children to predict what the truck will make.

This time the truck got the white powder from this building. The sign says “Cement.” When it mixes together the cement powder with water, what do you predict it will make? Lean and tell a partner!

After

INVITE children to pretend to mix up bubbles for a bath.

Let’s make a bubble bath along with the trucks. Sprinkle in some soap powder [demonstrate]. Pour in some water [demonstrate]. Mix them together like the cement mixer. Spin your arms around [demonstrate]. Presto!

Imagine you are relaxing in the bubbles. Take a deep breath in and blow away one of the bubbles!

Build Interest

CONNECT to *The Mixed-Up Truck*. **TELL** children they are going to investigate what happens when they mix sugar with water.

Scientists, we've been investigating what happens when you mix things. I have a new substance or item for you to investigate today! Here is some sugar. Sugar was one of the items the mixed-up truck used [show the marked page].

GIVE children time to explore the sugar with their senses (but no tasting) and magnifying glasses. **HAVE** out a small bowl of salt for comparison.

- Have you used sugar before?
- What do you know about it?
- What do you notice about it?
- How is it the same as salt? How is it different?

COLLECT the cups of sugar for later in the lesson.

Build Understanding

INVITE children to make predictions about what might happen when they mix sugar and water.

Based on what you saw when you mixed salt and water, what do you predict will happen when we mix sugar and water together?

Do you predict anything will change? Why?

WORK together to make a sugar and water mixture: add approximately one teaspoon of sugar to the cup/bowl of water; observe, stir, and observe again. **REFER** to the Anchor Chart: "We Can Describe."

Let's mix some sugar and water together and observe what happens. Who wants to add a teaspoon of sugar? What do you think will happen? Let's see.

Now let's stir the mixture to see what happens. What is happening? What do you observe?

Build Experience

GIVE each partnership a mixing bowl/cup of water and mixing tools. **RETURN** the cup of sugar to each group. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own mixtures.

REFLECT on the mixing experience.

Today you mixed water and sugar. Let's discuss...

- What happened when you mixed them together?
- What changed?
- How would you describe your mixture?
- Touch the mixture. How does it feel?
- Can you pick some up with your fingers?
- Were you able to unmix or separate the sugar from the water? Why or why not?
- What questions do you have?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Water and Sugar" to children's science journals (one per child).
- One small cup of sugar (approximately one tablespoon per partnership)
- Small bowl of salt
- Cover the table with newspaper or a tablecloth for easy clean up.
- Have the book *The Mixed-Up Truck* ready. Mark the page that shows the building with the sign "Sugar" with a sticky note.

Materials

- One bowl/cup per partnership
- Large pitcher of water
- Measuring spoon
- Mixing Tool Collection Box
- Magnifying glasses (one per child)
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools

Build Background Knowledge

Ask children to name other mixtures they have made using water.

Stretch Their Thinking

Make a salt and water mixture to compare to the sugar and water mixture.

Listen/ Look For

- How do children work as they mix?
- How do they describe the mixture?
- What questions do they ask?



Robust STEM Activities

Celebrate if and when children start bringing materials from home to use in their mixing experiments. Get behind their enthusiasm and co-investigate along with them. Inquiry is motivating and drives STEM learning. Let their curiosity determine which experiments are done. But, remember, you have to be willing to accept their choices even if they may seem silly or unimportant to you. To them, their ideas are precious. The only exception would be experimenting with living things such as bugs. Review the Power of 3 and talk about how important it is to treat living things carefully.

Mixture Safety

Make sure to continually review ways children as scientists can practice safety during the mixture investigations. Explain that scientists are always careful. Remind children that they should not put any materials in their mouth.

Greeting Time

Children pretend to make a mixture as they sing.

Creative Arts: Creative Movement and Dance

ASK children to name mixing actions.
REVIEW how to stir, swish, and shake.

Scientists, think about our mixing song. What mixing actions do you know?

- Can you show how to stir [show card]?
- How do you swish [show card]?
- How do you shake [show card]?

INVITE children to think about a mixture they want to make and how to mix it.

We've been making mixtures together. For example, we mixed water and salt together.

If you were making a mixture, what ingredients would you mix together? How would you mix them? Stir? Swish? Shake?

Let's change the words of our song to match one of your ideas.

CHOOSE one (or more) of children's ideas and sing about it. See the example below:

Shake, shake, shake it up

Mixing water and dirt!

We are all scientists,
[point to yourself]

I wonder what we'll make!
[turn both hands up]

Materials

- Picture cards for stir, swish, and shake
- *Blueprint Songbook*

Vocabulary Development

Children learn words incrementally, getting a more accurate fix on a word every time they are exposed to it. Frequency is the key to vocabulary development! Make sure to use repetition in varied, meaningful contexts.



Movement Time

Children do a balancing exercise.

Physical Development: Gross Motor Skills

STATE that today's exercise can balance our bodies and focus our brains.

What interesting mixtures we can make! Sometimes mixing can be challenging. It may even make us feel "mixed up" or confused like *The Mixed-up Truck* [show]! When you feel mixed up, how do you focus?

This exercise can help us balance our bodies and focus our brains!

MODEL the balancing exercise. **GUIDE** children to try it on each side.

First, I come onto my hands and knees.

Next, I reach one arm forward.

Then I lift my opposite leg straight out behind me. It may be tricky, but I try my best to balance.

Now it's your turn to try it! Come onto your hands and knees. Reach one arm forward. Lift your opposite leg straight behind you. Can you balance and count to five?

Bring your hand and foot back down, and get ready to try the other side.

Make & Prepare

- Familiarize yourself with how to do the balancing exercise on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.

Additional Material

- The book *The Mixed-Up Truck*

Talk Time

Children begin to notice mixing in their daily life.

Approaches to Learning: Initiative and Curiosity

REVIEW some of the mixing activities you have done. **SHARE** something you saw a child do that involved mixing. An example is provided below.

I wonder if that exercise would have helped *The Mixed-Up Truck* to focus [show book]?

Just like this truck, we have been making mixtures. We mixed toys together. We mixed water and different substances like salt and sugar. Scientists like Scientist Ahmed [show photo] make mixtures in science labs. We can mix in our new science lab too.

But did you know that we mix things together all the time? For example, I saw [child] mixing milk into their cereal this morning. Did you mix anything at breakfast or snack time?

INVITE children to notice all the ways that mixing occurs in their daily life. **START** a new Unit Project called "I Spy Mixtures."

Keep your eyes open for other times you see mixing taking place [gesture with your hand over your eye to mimic searching]. When you see it, say, "I spy mixtures!" Then we can add it to our new Unit Project [point]: "I Spy Mixtures."

Make & Prepare

- Launch the Unit Project. Create a chart where you record the mixtures children notice in their daily lives.

Additional Materials

- The book *The Mixed-Up Truck*
- Photo of Scientist Ahmed



Mixing in Daily Life

Children mix objects and materials together all the time! Highlight ways that they make mixtures throughout the day: at meal times (mixing cereal and milk), at play time (mixing at the sand table), when they wash their hands (soap and water). Make a game of noticing it, and soon children will join you as well.

Before

CONNECT to learning about tally marks. **ASK** children what they know about tally marks. **REFER** to the Unit Chart: “Tally Marks.”

We’ve been learning about tally marks. Here is our tally mark chart [point]. What do you know about tally marks?

INVITE children to practice making tally marks in the palm of their hand.

Yes, tally marks are a tool we can use when we count. Let’s practicing drawing tally marks to show different numbers. We can draw with our finger in the palm of our hand. Draw one tally mark like this [demonstrate].

CONTINUE guiding children as they practice making tally marks on their palm. Then **SHOW** the two mixing books. **INVITE** children to think about which book taught them more about mixing.

We have been learning a lot about tally marks and about mixing. Here are two books we have read about mixing [show the books]. Think about which book taught you more about mixing. We are going to use tally marks to vote.

Watch as I write the question we will vote on.

During

DRAW a picture of the covers of both books. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

Here are two books we read about mixing. I can draw a pig on the cover of this book to show that it is the book *Is that Wise, Pig?* What should I draw to show this one is *The Mixed-Up Truck*?

Suggested Message: “Which book taught you more about mixing?”

PAUSE to focus on concepts of print (concept of a word).

I am going to write, “Which book taught you more about mixing?” That would match my picture. Help me count how many words I am going to write. [count and hold up one finger for each word] Seven words! I am ready to write.

WRITE the message. Then **POINT** to the words and count them again. **INVITE** children to reread the message with you.

After

INVITE children to the board, one at a time, to draw a tally mark under the book that they are voting for. **ENCOURAGE** children to recall what to do to show five tally marks.

Let’s take turns coming to the board and adding a tally mark under the book that we are voting for. Remember, we want to find out which book taught you more about mixing. When it is your turn to vote, add a tally mark under the book you are voting for.

Who can remind us what to do when we want to show five tally marks?

COUNT and **COMPARE** the tally marks for each book.

How many votes did each book get? Let’s count the tally marks for each book and compare.

Did the books get an equal number of votes? Which book had more votes? Which book had less votes?

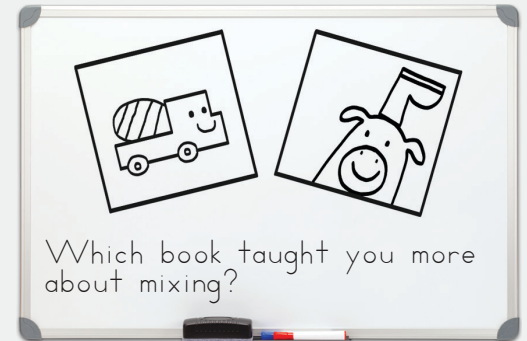
SUMMARIZE using tally marks to vote.

Today we voted to show which book taught us more about mixing. We each took a turn adding a tally mark to the book we chose. We compared the tally marks.

REREAD the message one more time.

[Transition] **INVITE** children to tell their neighbor what book they voted for and why.

Lean in and tell a partner which book you voted for and why.



Material

- Unit Chart: “Tally Marks”



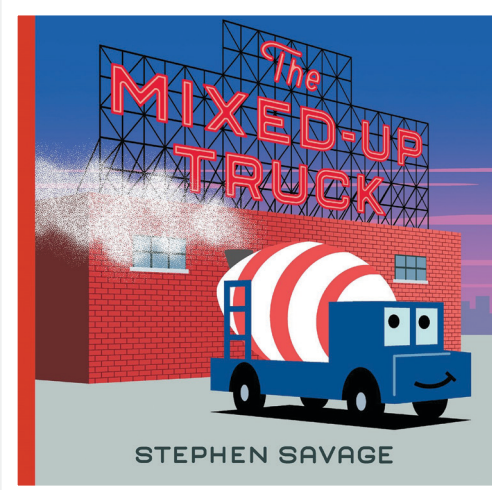
Tally Marks and 10 Frames

Visually, both tally marks and 10 frames help children recognize and count quantities quickly. A bundle of four marks with a line across signifies five with tally marks. In a 10 frame, children can quickly glance and see that the top row of five boxes or bottom row of five is filled in.



Keep It Going

- While children are eating snacks, invite them to show three pieces of their snack. Encourage them to draw tallies with their finger on the palm of their hand. Continue to have children show a number of snacks (one through 10) and draw tallies on their hands. If children have pretzel sticks for a snack, invite them to count the pretzels and then use the pretzels to make tallies.
- Gather children in a small group. Invite them to draw five tally marks on large chart paper or individual index cards. Encourage them to count as they write each tally mark and cross over the tallies when they get to five. Together, use the tally marks to count by fives. When they get to the last set of five, encourage them to jump to their feet. For example, cheer five, 10, 15, 20 (jump to their feet).



Make & Prepare

- Bring in a pair of socks to wear on your hands to illustrate the meaning of “mixed up.”

Additional Materials

- Anchor Chart: “Power of 3”
- Anchor Chart: “Feelings”
- Anchor Chart: “Cheers”

Reading Aloud

When you’re reading aloud, it is important to make sure that all of the children can see the illustrations. Slowly move the book from left to right.

Supporting Language Development

Use real-life examples to help children make connections to the meaning of phrases and idioms. Recalling classroom life experiences is the best way to help children “get it.” Perhaps you confused children’s names or used a wrong tool in the classroom. Ask children if they remember getting “mixed up” or confused.

Before

ACT OUT getting mixed up. For example, wear a pair of socks on your hands. Be silly as children explain what is wrong with how you are wearing them.

Hello, readers [wave]! What? My socks are in the wrong place? Silly me! I got mixed up, or a little confused [touch your temple and make a confused expression].

CLARIFY both senses of “mixing up” in the book: making mixtures, and making mistakes.

Do you think the truck in our book *The Mixed-Up Truck* gets confused too? Why?

Yes, the truck uses the wrong powders. It makes some mistakes and gets a little confused.

So it is a cement mixer [spin your arms around] that gets mixed up [make a confused expression].

INVITE children to think about how the truck takes care of itself. **REFER** to the Power of 3: “Keep on trying.”

When the truck makes a mistake, does it just give up? Does it quit? No, what does it do? How does it take care of itself?

The truck takes care of itself because even when it makes mistakes, it keeps on trying [point]! That’s part of the Power of 3.

As we reread *The Mixed-Up Truck*, notice how the truck takes care of itself and keeps on trying.

During

Each time the truck makes a mixture, INVITE children to act out mixing like the truck and then say, “Presto!”

PAUSE after “Go mix up some powdery white cement.” **ASK** children what happened. **DISCUSS** how he feels. **HIGHLIGHT** that even though the truck made a mistake, it tries again.

What happened? Yes, the truck made a mistake. It got mixed up and used flour instead of cement powder. When it mixed the flour with water, it made a cake instead of a building.

Look at the expression on the truck’s face. How do you think it feels [refer to the Anchor Chart: “Feelings”]? Why?

Maybe the truck feels upset because it wants to do a good job and help make the building. So what can it do to take care of itself? It can try again!

PAUSE after “Go mix up some powdery white cement.” **ASK** children what happened. **DISCUSS** how it feels. **HIGHLIGHT** that even though the truck made another mistake, it tries again.

The truck tried again, but now what happened? It got mixed up and made another mistake. This time, it used sugar instead of cement powder.

Look at the truck’s expression. How do you think it feels? Why?

Maybe it feels even more upset because it still didn’t make a building. Now that it made two mistakes, should it just quit? No, it can keep on trying!

PAUSE after “A building!” **POINT** out that it succeeded on the third try.

Yay! The truck used the right powder and finally made the building! Even though it didn’t do it the first time, or even the second time, it kept on trying until it got it right! Look at the truck’s proud expression!

After

SUMMARIZE how the truck takes care of itself. **INVITE** children to choose a cheer for the truck.

How does the truck take care of itself?

Yes, even when it makes mistakes, it keeps trying! The truck practices the Power of 3, just like we do!

Why don’t we give the truck a cheer for taking care of itself? Let’s choose one from our “Cheers” chart!

Build Interest

CONNECT to previous mixing experiences. **TELL** children they are going to mix using a new powder. **PLACE** some cornstarch on a napkin for each child to investigate (but no tasting). **HAVE** sugar and salt out for comparing.

We are investigating what happens when we mix different materials together. In our book *The Mixed-Up Truck* [show], the truck mixed different powders with water. Today, I have a new powder for us to mix with. It's called cornstarch [show].

- Have you used it before?
- What does it feel and smell like?
- How is it the same or different from the salt [point] and sugar [point] we used?

Build Understanding

INVITE children to make predictions about what will happen when they mix this powder and water.

What might happen when we mix cornstarch and water together? What do you predict? Why?

WORK together to make a cornstarch and water mixture on a large tray.

We are going to work together to make a mixture of this new powder [point] and water [point].

- Who would like to pour the water into the tray?
- Who would like to add one tablespoon of cornstarch to the water?
- Now let's mix it. What do you notice?

SHOW children the clipboard where they can keep track of the tablespoons of cornstarch by making tally marks.

We should keep track of how much powder we add. How could we do that?

Yes, we can make one tally mark for each tablespoon of cornstarch we add [show]. Who would like to be the recorder?

Build Experience

CONTINUE taking turns adding cornstarch, observing the mixture, and making tally marks. **USE** what you know about each child's language skills to include and extend participation. **REFER** to the Anchor Chart: "We Can Describe."

- Gesture: Show me how to add the cornstarch. Show me how you stir the mixture.
- Yes/No: Did the cornstarch change? Did the water change? Does it feel [descriptive word]?
- Either/Or: Did the cornstarch change, or did it stay the same? Does it feel [descriptive word] or [descriptive word]?
- Open-ended: What is happening as you mix the cornstarch to the water? Touch the mixture. How does it feel?

REFLECT on the mixing experience.

Today we mixed a new powder with water. We kept adding more powder and observing. Let's discuss...

- What happened? Did the mixture change? How?
- How many tablespoons of powder did we add?
- Were we able to unmix or separate our materials? Why or why not?
- How is this mixture the same or different from the other mixtures we made?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Water and Cornstarch" to children's science journals (one per child).
- Cover the table with newspaper or a reusable tablecloth.

Additional Materials

- Small bowl of salt
- Small bowl of sugar
- Rimmed baking sheet or shallow container (that children can gather around and reach into)
- Box of cornstarch
- Cup of water
- Mixing Tool Collection Box
- Anchor Chart: "We Can Describe"
- Clipboards with paper
- Pencils
- Science journals
- The book *The Mixed-Up Truck*

Build Background Knowledge

Focus on exploring the cornstarch. Help children develop vocabulary to describe its properties.



Stretch Their Thinking

Change the amount of water in the mixture. Discuss what happens.

Listen/ Look For

- What do children remember about tally marks?
- How do children describe the mixture during its various stages?
- What are children learning about mixing?

Use Care!

DO NOT dump this down the drain. Instead, leave it out overnight for the water to evaporate. This is a whole other investigation in itself!



Did You Know?

Cornstarch mixed with water makes a "non-Newtonian" fluid. This means it can act like a solid or a liquid depending on the kind or type of force you apply (e.g. if you shake, stir, or roll it). It's also commonly referred to as oobleck. If your children enjoy investigating its properties, extend the number of opportunities children have to experiment with it.



Keep It Going

- Looking for more tips and recipes for making textured doughs and putties using basic mixtures? Search "Early Learning Professionals at Penn State" for several child-friendly ideas. <https://extension.psu.edu/programs/betterkidcare/early-care/tip-pages/all/make-your-own-mixtures>

UNIT 6 WEEK

2

Be Sure To...

- Give children opportunities to observe bubbles and make bubble mixtures.
- Review initial sounds and teach the letter u and the letter x.
- Continue to review tally marks.

Materials

- Mixing Tool Collection Box, measuring cups and spoons, and eyedroppers
- Container of bubbles with bubble wand
- Food coloring
- Bubble mixture ingredients (see Day 6: Small Group for recipes)
- Baking soda and vinegar
- Materials for a sensory bottle (clear sealable container, beads, acorns, etc.)

Books

- *Bubbles*
- *How to Wash a Woolly Mammoth*
- *The Mixed-Up Truck*
- *Blueprint Songbook*

Charts

- Anchor Charts:
 - “Readers Can Say”
 - “We Can Describe”
 - “Power of 3”
 - “Feelings”
- Unit Charts:
 - “Words We Are Learning”
 - “Tally Marks”
 - “I Spy Mixtures” (make)

How we can mix and make bubbles?

Bubbles can be made from different mixtures. Bubbles float and come in different sizes.

Children explore and experiment with bubbles. They continue to think like scientists as they investigate different ways to make bubbles and explore their properties (e.g. shape, color, size). They review spheres and tally marks, and they compare the relative size of objects. They learn about a new way to calm themselves down when they are upset: blowing pretend bubbles. Additionally, they practice letter sound correspondence in addition to learning about the letter u and the letter x.

Keep in Mind

If you have materials that need to be prepared, or are in need of an extra pair of hands, keep in mind that families can and often do want to help out. They can come in and offer assistance during the school day. Or, if there is prep work they can do from home, they may appreciate the opportunity to be of service. Send home an email asking for volunteers and describe what you need.



Words We Are Learning

float

move slowly and gently through air or water

mysterious

strange, when you don't know about or understand something

scrub

to clean by rubbing, often with a brush



Multilingual Learner Anchor Words

- bubble
- size



From the Songbook

“I’m A Little Bubble”

- Encourage choral singing and have children sing the song together.
- Invite children to float up and down like the bubble as they sing.
- Replace the word “little” with “big,” “bigger,” or “biggest.”
- Encourage children to say the word “pop” in a silly voice.



Trips & Visitors

Invite a local veterinarian to your classroom. They can talk about how they take care of animals (especially, how they keep the animals clean).



Working with Families

This is a good time to focus on how often the mixture of soap and water is used at home. Ask families to highlight all the times each day children wash parts of their body or other things, such as dishes, the dog, or a car. Invite families to point out these experiences with bubble mixtures and send in photos.



Remember | <https://cliblueprint.org/resources-tx>

You can find downloads, videos and more on the Blueprint website.

	Day 6	Day 7	Day 8	Day 9	Day 10
Greeting Time	Children pretend to float like bubbles. <i>Creative Arts: Creative Movement and Dance</i>	Children float like bubbles to instrumental music. <i>Creative Arts: Creative Movement and Dance</i>	Children float to instrumental music and greet a partner. <i>Creative Arts: Creative Movement and Dance</i>	Children float to instrumental music and dance with a partner. <i>Creative Arts: Creative Movement and Dance</i>	Children float to instrumental music and dance in groups of three. <i>Creative Arts: Creative Movement and Dance</i>
Movement Time	Children breathe as if blowing bubbles. <i>Physical Development: Concepts of Health</i>	Children practice kangaroo pose. <i>Creative Arts: Creative Movement and Dance</i>	Children practice koala pose. <i>Creative Arts: Creative Movement and Dance</i>	Children practice woolly mammoth pose. <i>Creative Arts: Creative Movement and Dance</i>	Children practice yoga poses using ordinal numbers. <i>Math: Numbers and Number Sense</i>
Talk Time	Children discuss what they know and wonder about bubbles. <i>Approaches to Learning: Initiative and Curiosity</i>	Children participate in making a sensory bottle. <i>Science: Scientific Inquiry and Practices</i>	Children learn to calm down by pretending to blow bubbles. <i>Social Emotional: Self-Awareness and Self-Concept</i>	Children recognize uppercase letters. <i>Literacy: Phonological Awareness</i>	Children discuss the results of a survey. <i>Math: Measurement and Data</i>
Message Time Plus	Children learn about the letter x. <i>Literacy: Phonological Awareness</i>	Children learn the word “mysterious.” <i>Literacy: Vocabulary</i>	Children play the game “Is This a Sphere?” <i>Math: Geometry and Spatial Relations</i>	Children compare the size of objects. <i>Math: Measurement and Data</i>	Children learn about the letter u. <i>Literacy: Phonological Awareness</i>
Intentional Read Aloud	Children make predictions. <i>Literacy: Comprehension</i>	Children discuss the characters’ friendship. <i>Social Emotional: Social Awareness and Relationships</i>	Children make connections. <i>Literacy: Comprehension</i>	Children participate in using tally marks to show 10 steps. <i>Math: Numbers and Number Sense</i>	Children discuss how the girl takes care of her pet. <i>Social Emotional: Social Awareness and Relationships</i>
Small Group	Children mix soap and water to explore bubbles. <i>Science: Physical Sciences</i>	Children use straws to explore bubbles. <i>Science: Scientific Inquiry and Practices</i>	Children create bubble paintings. <i>Creative Arts: Visual Arts</i>	Children observe bubbles made from mixing baking soda and vinegar. <i>Science: Physical Sciences</i>	Children solve a problem: how to replace a missing bubble wand. <i>Approaches to Learning: Initiative and Curiosity</i>
Reflection Time	If you were a bubble, where would you float?	Koala was shy when Kangaroo said hello to her. Have you ever felt shy?	What do you think it feels like to be a bubble?	If you could have any animal as a pet, which would you choose?	How can we mix and make bubbles?

Centers to Launch

See Pages 14-25

- Art Center | Bubble Wrap Painting
- Art Center | Painting With Music
- Block Center | Popping Bubble Wrap
- Math Center | Rolling Dice
- Science Center | DIY Bubble Wand
- Sensory Table | Bubble Bath



Greeting Time

Children pretend to float like bubbles.

Creative Arts: Creative Movement and Dance

SHOW marked page in *The Mixed-Up Truck*.

Scientists, we are making mixtures. In *The Mixed-Up Truck* [show], the truck mixes different powders with water. When he mixes soap and water, what does he make? Yes, bubbles! Look at these bubbles floating through the air!

BLOW bubbles. **ASK** children to observe and describe how they move. **ADD** “float” to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language).

Here is a mixture of soap and water. Watch as I dip the wand and blow some bubbles. What do you notice?

Yes, as bubbles float through the air, they move slowly and gently. Let’s add “float” to the list of words we are learning. Do you know any words that mean the same thing?

MODEL how to float like a bubble.

How would it feel to float like a bubble? Imagine we are bubbles! I’ll stand up slowly and make a round shape with my arms overhead. I’m walking on my tiptoes, slowly and gently, like a floating bubble.

INVITE children to “float” like bubbles around the circle. When they return to their spots, **ENCOURAGE** them to greet the group.

Make & Prepare

- Have the book *The Mixed-Up Truck* ready. Mark the page that shows a bubble bath.
- Container of bubbles with bubble wand

Materials

Unit Chart: “Words We Are Learning”

Words We Are Learning

float: move slowly and gently through air or water

Supporting Multilingual Learners

Explicitly teach the word “bubble” to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children’s home language (use an online translation tool). This will support their comprehension of the thematic content.

Movement Time

Children breathe as if blowing bubbles.

Physical Development: Concepts of Health

FOCUS on which body parts are used to blow bubbles.

What parts of your body did you use to float like a bubble? What body parts do we use to blow bubbles?

MODEL and **INVITE** children to blow pretend bubbles.

Let’s stand. Make believe you are dipping a bubble wand into a bubble mixture, and hold it in front of your mouth. Take a deep breath in through your nose. Now blow the bubbles through your mouth.

MODEL breathing out several, short exhales through your mouth. **GUIDE** children to practice this breath.

What if we take the same deep breath in, but then blow lots of short breaths out like this?

Dip your wand, hold it in front of you, take a deep breath in through your nose. Now blow out lots of short breaths through your mouth.

You blew lots of pretend bubbles! Let’s take a deep breath in, and let out a long sigh.

Vary the Lesson

Use real bubble solution and wands for this activity.

Keep It Going

- There are endless opportunities to explore bubbles outside. Children can chase bubbles, observe the way the wind blows the bubbles, and observe the splatter that bubbles make on different surfaces. They can try to blow bubbles that touch the sky.

Talk Time

Children discuss what they know and wonder about bubbles.

Approaches to Learning: Initiative and Curiosity

BLOW more bubbles. **ASK** children to observe them again. **DISCUSS** what children know and wonder about bubbles. **CHART** their ideas. **ASK** guiding questions like the below suggestions.

We know how bubbles float through the air, and how to blow bubbles. I’m going to blow more bubbles now. Observe them closely. Scientists like Scientist Ahmed [show photo] learn about the world around them by making close observations.

- What else do you notice about these bubbles?
- What shapes, sizes, or colors do you see?
- What else do you know about bubbles?
- Where else have you seen or made bubbles?
- Do you have any questions about bubbles?
- What would you like to find out about?
- What do you wonder about bubbles?

We will be mixing and making bubbles! If you feel excited, blow another pretend bubble!

Materials

- Chart paper and markers
- Photo of Scientist Ahmed

I Spy Mixtures

Don’t forget to include the Unit Project by pointing out when children are mixing (such as when they are washing their hands and mixing soap and water) and add these to the Unit Chart: “I Spy Mixtures.”

Before

REVIEW the letters on the letter ring in a different order. **ASK** children what the letter name is and what sound the letter makes. Then **SHOW** the marked page from the book *The Mixed-Up Truck*. **ASK** children how the truck mixed bubbles.

We are learning about bubbles! We remembered the bubbles the truck made in the book *The Mixed-Up Truck* [show]. What did it mix to get bubbles? Yes, soap and water. This made a nice bubble bath! Just what the trucks needed to relax after a long day when they were dusty and tired.

FOCUS on words that have the /ks/ sound spelled with the *letter x* at the end of words

Usually we listen to the beginning sounds of words. But what sound do you hear at the end of the words “mix” and “relax” [hold hand up to your ear]? Listen again for the sound at the end: mix, relax. Yes, /ks/. Does anyone in our class have a name with the /ks/ sound?

DESCRIBE how to form the *letter x*, as you write the letters in the corner of your board. **INVITE** children to skywrite the letters. Optionally, teach the ASL sign.

The *letter x* makes the sound /ks/. To write an uppercase *letter X*, I start at the top and slide down. Then I slide down again. Now you write it with your finger in the air. This is the lowercase *letter x*. I slide down and then slide down again. Now you try it. While I write today, please look for the *letter x*. We are going to learn how to read it together.

During

DRAW a picture of a bathtub with bubbles. **INVITE** children to contribute. **DESCRIBE** what you are thinking and drawing.

Here is a picture of a bathtub with bubbles in it. What shape should I make the bubbles?

Suggested message: “Mix a bubble bath to relax.”

PAUSE to focus on phonological awareness (/ks/ in the word “mix”).

I hear the /ks/ sound at the end of the word “mix.” The *letter x* makes the /ks/ sound. Watch me as I write the lowercase *letter x*. I slide down and slide down. Now you try it.

REPEAT with the lowercase *letter x* in the word “relax.” After, **INVITE** children to reread the message with you.

After

INVITE children to find all the *letter x*'s in the message. **CIRCLE** them.

Let's find all the *letter x*'s. Put on your “I spy” goggles like this [demonstrate], and look for the *letter x*! Who wants to point to one in the message?

Play “Look Like the Letter.” MODEL and then **INVITE** children to make a *letter x* with their arms when they hear a word that ends with the /ks/ sound.

We can make our body look like the *letter x*, like this [demonstrate]. Do I look like a *letter x*? How do you know? Everyone stand up and make your arms into the shape of the *letter x*. Now, let's sit back down and get ready to play a game.

When you hear a word that ends with the /ks/ sound, stand up and make the *letter x* in the air with your arms. If the word I say doesn't end with the /ks/ sound, stay seated. Try it with me! The word is “fix.” What should we do? /ks/, “fix” ends with the *letter x*. Let's stand up and make a *letter x* in the air with our arms! Great! Now let's sit back down.

RESTATE the name and sound of the *letter x*.

Today we listened to the sound the *letter x* makes at the end of words, talked about what it looks like, and found it in our message. We learned that “mix” has the /ks/ sound at the end.

REREAD the message one more time.

[Transition] **ASK** children to make a *letter x* with their arms.

We can use our bodies to make a *letter x* shape. Let's all cross our arms in front, like this, in the shape of a *letter x* and say the sound again!



Make & Prepare

- Review the standard pronunciation of this consonant on the *Blueprint* website.
- Familiarize yourself with the ASL sign for the *letter x* on the *Blueprint* website.
- Letter Ring – write the uppercase *letter X* on one side of an index card and the lowercase *letter x* on the other; add this to the Letter Ring after the lesson.
- Have the book *The Mixed-Up Truck* ready. Mark the page that begins “a bubble bath.”

Letter Formation

- Uppercase *letter X*— slide down, slide down
- Lowercase *letter x*— slide down, slide down

Did You Know?

In English, the *letter x* has several possible pronunciations:

- /ks/ sound, as in “box”
- /gs/ sound, as in “exact”
- /z/ sound, as in “xylophone”

While beginning sounds generally are taught before ending sounds, the *letter x* is more frequently used at the end of words familiar to children.

Pronouncing the Sound

This sound is made by combining two sounds: the /k/ and the /s/. You open your mouth and lift your tongue in the back. Then your tongue falls down as you make a small puff of air, like the /k/ sound. Next close your teeth together and smile, with your tongue behind your teeth. As air comes out, you are making the /s/ sound.



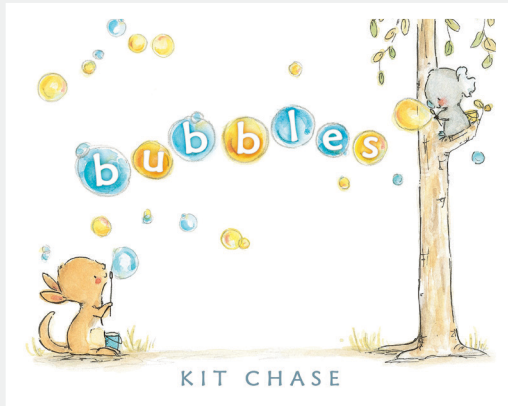
Family Engagement

In this lesson, we ask children to make their body look like the *letter x*. Connecting physical movements and literacy is a useful strategy. Download and print “Look Like the Letter” and send it home to families so they can playfully work on these skills with their children.



Keep It Going

- While reading at the library center, invite children to go on a “letter hunt.” Encourage them to listen for the /ks/ sound and find the *letter x* while you read a book.



Make& Prepare

- Review the ASL sign for “I predict” on the *Blueprint* website.

Additional Materials

- Anchor Chart: “Readers Can Say”
- Unit Chart: “Words We Are Learning”

Words We Are Learning

mysterious: strange, when you don't know about or understand something

Supporting Multilingual Learners

Remember, ALL multilingual learners, whether they are new English language learners or completely fluent in English, will benefit from talking with a partner who speaks the same home language. Thinking and sharing in both of their languages solidifies their learning.

Keep It Going

- ASL signs are incorporated into read alouds and Message Time Plus lessons as a way to invite and extend children's participation. Don't end there! Feel free to incorporate the use of signs into Gathering Times, Small Group, transitions, and other times during the day. They are a wonderful way to encourage children's engagement with the content and classroom community.



Before

INVITE children to pretend to blow bubbles. **SHOW** the cover. **ASK** what they notice.

We are learning about bubbles. Let's pretend to blow bubbles now...

Today we are going to read a book called *Bubbles*, both written and illustrated by Kit Chase. Look at the picture on the front cover. What do you notice?

RECAP children's responses. **INVITE** children to make a prediction. **PROMPT** them to use the sign and sentence stem, “I predict.”

Who do you see? What animals are they? What are they doing?

We see a little kangaroo [point] on the ground and a koala [point] in the tree. Both animals are blowing bubbles.

Think for a moment about what might happen in this book. If you would like to share your prediction, please sign “I predict” [demonstrate]. You can say, “I predict...”

You are getting ready to read by predicting. Let's find out what happens in *Bubbles*!

During

PAUSE after “One day she saw some mysterious bubbles.” **DEFINE** “mysterious.” **ADD** “mysterious” to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language).

Kangaroo sees bubbles that are mysterious. Can you say “mysterious”? Let's find the beats or syllables in that word: mys-te-ri-ous. When something is mysterious, it seems strange. You don't know about it or understand it. Let's add “mysterious” to the list of words we are learning. Do you know any words that mean the same thing?

How are these bubbles mysterious to Kangaroo? Yes, she doesn't know where they are coming from.

INVITE children to make predictions. **REMIND** them to sign and say, “I predict.”

Where do you think the bubbles are coming from? What do you think Kangaroo will do next? If you would like to share your prediction, sign “I predict.” Say, “I predict...”

PAUSE after “Soon some bubbles floated by again.” **INVITE** children to make predictions. **REMIND** them to sign and say, “I predict.”

Kangaroo sees more bubbles floating through the air. Did she blow these bubbles? Who do you think is blowing them? Why?

Think about what Kangaroo might do next. If you would like to share your prediction, sign “I predict.” Say, “I predict...”

PAUSE after “And it was heading right toward Kangaroo!” **ASK** children to share predictions.

What do you predict will happen next? Sign “I predict” if you'd like to share...

After

MODEL and **GUIDE** children to blow a big bubble monster and pop it.

Kangaroo and Koala blew so many bubbles in this book. They also popped the big bubble monster!

Let's pretend to pop a big bubble monster too! Use your hands to make a round shape in front of you, like a bubble [demonstrate]. Blow three times to make the bubble grow bigger, bigger, bigger, and then clap your hands together one time and say, “Pop!” Let's try it together...

Build Interest

CONNECT to the bubble discussion from Talk Time.

During Talk Time, we shared what we know about bubbles. Now it is time to make a bubble mixture! We are making mixtures just like Scientist Ahmed [show photo]!

One way to make bubbles is with soap. What else do you think we need?

SHOW the materials for the exploration (mixing bowl, water, mixing tools, etc.). **SHOW** and **READ** the directions for making a bubble mixture.

Yes, we need... We also need to follow directions to make a bubble mixture. Here are the directions we will follow today [point]. Look at the words and listen, as I read the directions.

Build Understanding

COLLABORATE with children to make a bubble mixture. **INVITE** them to make predictions and observations. **USE** what you know about each child's language skills to include and extend participation. **REFER** to the Anchor Chart: "We Can Describe."

Let's follow the directions and make a bubble mixture together!

- Gesture: Show me how to fill the cup. Can you pour? Add some soap. How do you stir? Can you mix faster? Pop one of the bubbles!
- Yes/No: Do you want to add the soap? Is it time to stir? Should we use the [mixing tool]? Can you stir faster?
- Either/Or: Do you want to add the water or the soap? Should we let it sit or should we stir? Should we use the [mixing tool] or the [mixing tool]? Should we stir fast or slow?
- Open-ended: What do you predict will happen when we add soap? What do you see happening? What do you notice? What questions do you have?

Build Experience

GIVE each partnership a bowl with some of the bubble mixture in it. **ENCOURAGE** them to predict, mix, observe, and try to pop the bubbles. **INVITE** multilingual learners who speak the same language to work together in their home language.

I'll scoop some of the bubble mixture into a bowl [point] for you and your partner to investigate. You can use the tools to mix and observe. Do you think you can pop the bubbles? Make a prediction about what you think will happen and then try to pop it!

REFLECT on making and investigating the bubble mixture.

Today you made a bubble mixture. Let's discuss...

- What happened?
- How would you describe the bubbles?
- What shape are bubbles?
- Did you pop the bubbles? How? What happened?
- Were you able to separate or unmix the mixture? Why or why not?
- What other questions do you have?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Water and Soap" to children's science journals (one per child).
- Cover the table with newspaper or a reusable table cloth for easy clean up.
- Decide how to make the bubble mixture (below are two examples) and what role children will have. Do you want them to squirt a bit from the bottle of dish soap? Do you want to add some dish soap to a bowl and have them use an eyedropper or a spoon? Make sure to write the directions on chart paper for reference during the lesson. Keep in mind, you will be making more of the same bubble mixture with children on Day 7: Small Group.

Bubble Mixture #1

- 4 tablespoons dish soap
- 1 cup water
- 2 tablespoons light Karo syrup or 2 tablespoons glycerin (makes bubbles more sturdy)

Bubble Mixture #2

- 1/2 cup of dish soap (8 tablespoons)
- 1 1/2 cups of water
- 2 teaspoons of sugar (makes bubbles more sturdy)

Additional Materials

- Mixing bowls (one for each partnership)
- Measuring cup and spoons
- Mixing Tool Collection Box
- Tools for popping bubbles (toothpicks, etc.)
- Photo of Scientist Ahmed
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools

Build Background Knowledge

Ask children about the bubbles they see when they wash their hands.



Stretch their Thinking

Invite children to compare mixing tools that they used for bubble making. Which tools are best? Why?

Listen/Look For

- What ideas do children have about setting up the exploration? How do they think the materials should be used?
- What observations do children share as they work?

Greeting Time

Children float like bubbles to instrumental music.

Creative Arts: Creative Movement and Dance

ASK a child to pretend to float like a bubble. **INVITE** children to circle arms overhead and stand on tiptoes.

Scientists, when we blow bubbles, how do they move? Yes, they float through the air, moving slowly and gently. Who can remind us how to pretend to float like a bubble? Can you all make a round shape with your arms overhead and stand on tiptoes? Relax your arms and feet.

SHOW photo of Mary Youngblood. **EXPLAIN** how to float as you play music, pause when the music stops, and then float back to circle spots when the music comes back on.

I'm going to play Native American flute music by Mary Youngblood [show photo]. The way this music sounds reminds me of floating bubbles. Float like a bubble around our circle to the music. When the music stops, pause like a game of freeze dance. When the music comes back on, float back to your circle spots. Get your body ready to float like a bubble.

PLAY 30 seconds of music, as children walk around the circle. PAUSE the music for them to freeze. PLAY music to get them back to their spots. Then INVITE them to greet the group.

Turn to the middle and say hello to your bubble friends!

Make & Prepare

- Cue up an audio sample of Native American flute music.
- Download and print a photo of Mary Youngblood playing the flute.

Mary Youngblood

We are featuring the music of Mary Youngblood, the "first lady of the flute." She is the first Native American woman to have received a Grammy Award for "Best Native American Music Album." Song suggestions include: "Reach for the Sky," "Misty Rain," and "Beneath the Raven Moon." Feel free to select another musician or genre of music that meets the interests of your children.



Movement Time

Children practice kangaroo pose.

Creative Arts: Creative Movement and Dance

SHOW the marked page in *Bubbles*. **ASK** how Kangaroo moves. **POINT** out her legs and feet.

In *Bubbles*, Kangaroo follows floating bubbles. Look at her in this picture. How do you think she is moving?

Yes, she is jumping. Her feet are lifted off the ground. Kangaroos have strong legs and feet to help them jump! How would you like to move like a kangaroo? Let's do a kangaroo yoga pose!

MODEL kangaroo pose. **GUIDE** children to practice the pose. **ENCOURAGE** them to blow pretend bubbles.

I start standing with my knees bent and my hips low. Next, I pull my elbows back so my wrists are beside my ribs. Now I'm ready to jump: boing!

Now it's your turn to pose like a kangaroo. Please stand up, bend your knees, and lower your hips. Imagine you have strong kangaroo legs and feet. Pull your elbows back to bring your wrists beside your ribs. Get ready to jump in place: boing!

Let's be Kangaroo from the book. Dip your wand in the soap and water mixture. Take a deep breath in, and blow some bubbles over to Koala!

Make & Prepare

- Have the book *Bubbles* ready. Mark the page that says "So she followed the bubble trail" with a sticky note.
- Familiarize yourself with how to do kangaroo pose on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.

Additional Material

- *Blueprint Yoga*

Yoga Pose Cards

In addition to the book *Blueprint Yoga*, you can download and print cards of these poses from the *Blueprint* website. Add them to a basket or ring, and make them accessible throughout the day. Use them to take yoga breaks and invite children to do the same.

Talk Time

Children participate in making a sensory bottle.

Science: Scientific Inquiry and Practices

TELL children they are going to make a mixture for the science lab.

We made a bubble mixture and many other mixtures recently [refer to photos].

Let's make a mixture that we can keep in our science lab dramatic play center called a sensory bottle. We can make this mixture inside a bottle so everyone can observe it.

SHOW the materials.

Here are some materials we are going to use [point]. What do you see? How do you think we should mix these materials together?

INVITE children to assist in creating the bottle. **ASK** them to predict what will happen and invite some volunteers to mix it up. **DISCUSS** their observations using the guiding questions below.

- What should we add first? Who can help?
- How can we mix the materials together?
- What do you predict will happen? Who can come show us?
- Observe the mixture. What do you notice?
- Why do you think we call this a "sensory" bottle?
- Who wants to add this sensory bottle to the science lab?

Make & Prepare

- Gather materials for making a sensory bottle. For example, use a clear, sealable bottle, a funnel, water, oil, and sequins.

Additional Materials

- Photos of children at work making mixtures

Sensory Bottles

Sensory bottles are relatively simple to make from recyclable materials, customizable, and engaging. Children are drawn in when they shake and mix the contents of the bottle. They can practice scientific skills, such as observation and prediction, as they watch the contents of the bottle move. The swirling and floating objects inside the bottles can also help children focus and self-regulate when they need to calm down.

Before

NOTICE the paint brush or object you placed near the board.

Look at this! How did this paint brush get here? I don't know! How mysterious!

CONNECT to the book *Bubbles*. **FOCUS** on the word “mysterious.” **POINT** to the word on the Unit Chart: “Words We Are Learning.” **SHOW** the picture and **READ** the marked page. **INVITE** children to make the “I hear” sign when they hear the word “mysterious.”

This makes me think of the book *Bubbles*. The author uses the word “mysterious” to describe something that is unknown [point to the word on the chart]. Look at the picture and listen for the word “mysterious,” as I read a page from the book. Make the “I hear” sign [demonstrate] when you hear it!

COUNT the beats in the word “mysterious.”

You heard the word “mysterious.” Can you say “mysterious?” Let's stand up and count the beats or syllables: mys-te-ri-ous [touch head, shoulders, knees, toes]. The word “mysterious” has four beats.

ASK children to tell why the bubbles were “mysterious” for Kangaroo.

What was mysterious for Kangaroo? Yes, the bubbles! Why were they mysterious? Yes, they were mysterious because he did not know where they were coming from or who made them.

Let's keep thinking about the word “mysterious!” Listen for it in the message today.

During

DRAW a few bubbles. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

I want to draw some bubbles. What shape should I draw? How many bubbles should I make?

Suggested message: “Who made the mysterious bubbles?”

PAUSE to focus on vocabulary (the word “mysterious”).

I want to write the word that tells when you don't know or understand something. What word do I want to use? [encourage children to recall the word “mysterious”] Yes, “mysterious” means I don't know who made the bubbles.

FINISH writing the message. Then **INVITE** children to reread the message with you.

After

INVITE a volunteer to find the word “mysterious” in the message. **DRAW** a box around it to emphasize the concept of a word. **ASK** children to define the word.

Who would like to come point to the word “mysterious” in the message? How do you know that is the word “mysterious?” What does it mean?

PLAY a game with children. **SHOW** a “mysterious” item that is wrapped in paper. **PASS** it around for children to hold and examine. **INVITE** children to guess what the mysterious item is.

Let's play a game to practice the word “mysterious” some more. I wrapped up a mysterious object in paper [hold up object]. What mysterious or unknown item is inside the wrapping paper? Look at the shape of the object. Hmm... what could it be? Let's pass it around so everyone can get a close look and then share what we think. What could the mysterious object be?

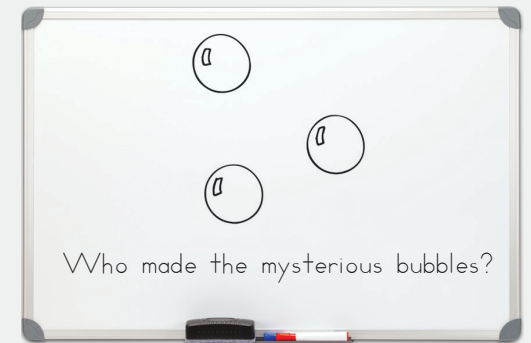
REVIEW the meaning of the word “mysterious.”

Today we learned the word “mysterious.” Kangaroo saw some mysterious bubbles. He did not know who made them! When something is mysterious, you do not understand it or know about it.

REREAD the message one more time.

[Transition] **INVITE** children to think about how they would “teach” the vocabulary word to someone at home.

When you go home, why don't you teach someone in your family what the word “mysterious” means? Let's rehearse what you might say and do. Tell your partner what “mysterious” means.



Make & Prepare

- Have the book *Bubbles* ready. Mark the page that begins “One day, she saw.”
- Place an object from another area in the classroom (such as a paint brush) on or near the MTP board.
- Wrap a “mysterious” item in wrapping paper. Choose an item that is unusually shaped yet familiar to the children (i.e. a mixing tool such as a wooden spoon, or a classroom object such as a pointer).
- Review the ASL sign for “I hear” on the *Blueprint* website.

Additional Material

- Unit Chart: “Words We Are Learning”

Be Playful with Vocabulary

Be expressive and playful with new vocabulary! When children hear you enjoy using new words, they will attempt to use them as well. Make your voice match the word and encourage children to try. For the word “mysterious,” try:

- “A mysterious knock at our door! Who could it be?”
- (For items in the lost and found) “Here is a glove someone lost. Who is the mysterious owner of the glove?”



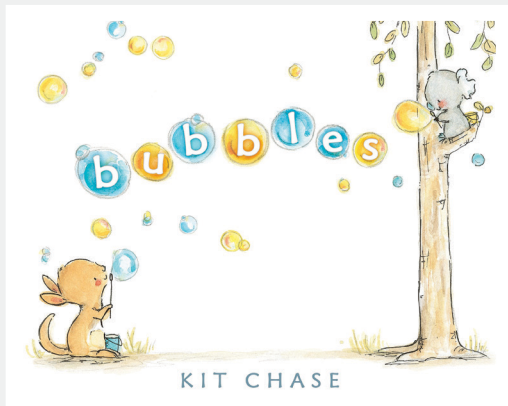
Keep It Going

- Create a mystery bag with an unknown object inside that children can touch but not see. Invite them to ask questions about the mysterious item. Encourage them to use the word mysterious when asking about the object. Provide clues if needed. For example, “This mysterious object is yellow and round. You can play tennis with the mysterious object.”



Family Engagement

Encourage children and families to use the word “mysterious” at home. Print the Building Vocabulary: “Mysterious” card from the *Blueprint* website.



Materials

- Anchor Chart: "Power of 3"

Anchor Chart: "Feelings"

The characters in books show different feelings. For example, at first in this book, Koala seems shy to make a new friend. Continue to talk about feelings with children. Guide them to use the Anchor Chart: "Feelings" to point out and describe their emotions. Add more feelings to the "Feelings" chart, as you see your children experiencing and expressing them.

Keep It Going

- Splash, whoosh! Can children describe what bubbles popping sounds like? Just like animal sounds, using onomatopoeia (sound words) to describe what children hear encourages their love of playing with language.
- Go to PBS Learning Media and do a search on bubbles to find related pre-k videos.
<https://why.pbslearningmedia.org/>



Before

SHOW the cover. ASK children if they think the characters are friends.

Do you think Koala and Kangaroo are friends? Why or why not?

CONNECT to the Power of 3. SET THE FOCUS: Notice how the characters take care of each other.

Let's look at our Anchor Chart: "Power of 3." What are some ways that we try to take care of each other in our classroom community?

We play together. We can be helpful. We act kindly toward one another. We think about how each other feels.

As we reread *Bubbles* today, let's think about the friendship between Kangaroo and Koala. How do they become friends? How do they take care of each other?

During

PAUSE after "and found Koala." ASK children how Kangaroo could meet Koala.

Are Kangaroo and Koala friends? How do you know?

They have never met before. They don't know each other yet. How can they get to know one another? If you were Kangaroo and saw someone blowing bubbles just like you, what would you say or do?

PAUSE after "Koala didn't want that either." RECAP how Kangaroo has tried making friends. ASK children how Koala feels. INVITE children to make a shy expression.

- How has Kangaroo tried to make friends with Koala?
- Kangaroo has tried saying hello, giving Koala a lollipop, and showing him a pinwheel. She is acting kindly, but what does Koala do?
- Why do you think Koala climbs the tree and hides? How might he be feeling?
- Maybe Koala feels shy about meeting someone new. Have you ever felt shy to talk or play with someone new? Can you make a shy expression?

PAUSE after "Koala and Kangaroo blew friendly bubbles to each other." ASK children how they are taking care of each other.

Koala felt shy at first. Sometimes a person needs more time to feel ready to play together. How does Koala show Kangaroo he is ready to play?

He blows some friendly bubbles her way! How are they taking care of each other?

They both love blowing bubbles. They're having fun playing together.

PAUSE after "'Let's go get that bubble monster!' said Koala." ASK children how the characters are taking care of each other. INVITE children to get ready to pretend to pop the bubble.

How are they taking care of each other here?

Yes, they are helping each other! They are working together to pop the big bubble monster. Let's get ready to pop it with them...

After

INVITE children to make a connection to their lives: What do they like to do with their friends?

Kangaroo and Koala became great friends! They take care of each other in many ways. One way is by playing together. They blow bubbles together. What do you like to play with your friends?

Build Interest

DISTRIBUTE straws to each child. **INVITE** them to blow air onto the palms of their hands.

We have been using spoons and other mixing tools to stir our mixtures. Today we are going to do something different. We are going to blow on our mixtures. Here is a straw for each of you.

Make sure you don't suck in through the straw like you're drinking! Instead, can you practice blowing through your straw onto the palm of your hand like this [demonstrate]? Can you blow softly? What does it feel like?

RECALL making bubbles. **SHOW** the bubble mixture directions and the mixing tools.

Let's put our straws down for a moment.

Today we are going to make more bubbles! We will need our directions to know how much of each material to pour into the bowl.

INVITE children to make predictions.

What do you think will happen if we use our straws to blow into our bubble mixture today?

Build Understanding

SHOW the materials. **COLLABORATE** with children to make a bubble mixture.

Let's follow the directions one more time to make a bubble mixture. What is the first step? What should we do next?

INVITE children to use their straws to take turns carefully blowing into the bubble mixture. **DISCUSS** what is happening. **USE** what you know about each child's language skills to include and extend participation. **REFER** to the Anchor Chart: "We Can Describe."

We followed the directions, and now the mixture is ready. Let's use our straws to carefully blow into the mixture! Who wants to go first?

- Gesture: Where is the straw? Can you blow? Can you blow harder?
- Yes/No: Is this the straw? Can you blow? Can you blow harder? Did the bubbles pop?
- Either/Or: Should we blow harder or softer? Did the bubbles pop, or did they stay the same? Did they pop on the paper or on the table?
- Open-ended: What do you see happening? What happens when you blow softer? Harder?

Build Experience

GIVE each partnership a bowl with some of the bubble mixture in it. **ENCOURAGE** them to predict, blow, observe, and try to pop the bubbles. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and blow into your bubble mixture.

REFLECT on making and investigating the bubble mixture.

Today we blew into our bubble mixtures. Let's discuss:

- What did you notice when you blew harder? Softer? What happened?
- Did the bubbles pop on your paper?
- What sound did the bubble pops make?
- Were you able to separate or unmix the mixture? Why or why not?
- What other questions do you have?

DISTRIBUTE science journals. **INVITE** children to record their thinking.

Make & Prepare

- Gather the ingredients from Day 6: Small Group to make more bubble mixture with children.
- Each child will need one straw. Think about where children will hold the straws as they blow into them. Poke a hole just below where you think their fingers will rest. This will prevent children from being able to suck in the bubble solution.
- Cover the table with newspaper or a reusable table cloth for easy clean up.

Additional Materials

- Mixing bowls (one for each partnership)
- Tools for popping bubbles (toothpicks, etc.)
- Newspaper or reusable table cloth
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools

Build Background Knowledge

Reread or connect to images from the book *Bubbles*. Talk about how Koala and Kangaroo blow bubbles with their breath.



Stretch their Thinking

Invite children to compare the bubble pops on their paper. Which is a big bubble pop? Bigger? Biggest?

Listen/Look For

- What do children notice as they change the way they blow through the straw?
- What words do children use to describe what happens to the mixture?

Remember to be Flexible

If children want to try mixing other easily accessible materials, bring in items from home, or want to reasonably change the quantity they are using, be flexible. Let your children's interests and ideas lead the way.



Supporting Multilingual Learners

We use the strategy of "Layered Questioning" in the "Build Understanding" section of the lesson. This strategy involves scaling the discussion to each child's language ability. Children who are still focusing on understanding English will be able to show what they know through actions and gestures. Others who are more proficient will be able to answer increasingly more complex questions, or just chime in with their ideas.

Greeting Time

Children float to instrumental music and greet a partner.

Creative Arts: Creative Movement and Dance

ASK a child to “float” like a bubble.

Who can remind us how to pretend to float like a bubble?

TELL children they can float around the room. **EXPLAIN** that when the music stops, they stand with a partner.

Today, let’s float around the room like this [demonstrate].

We will listen to Native American flute music by Mary Youngblood [show photo]. When the music stops, pause like this [demonstrate].

Tiptoe over to a partner. Stand facing each other and say hello [demonstrate]! When the music comes on again, float back to your spots.

Get your body ready to float like a bubble.

PLAY 30 seconds of instrumental music, as children “float” around the room. PAUSE the music for them to greet a partner. PLAY music to get them back to their spots.

Now that you have floated back to your circle spot, let’s all relax our bodies.

Make & Prepare

- Cue up an audio sample of Native American flute music by Mary Youngblood.

Additional Material

- Photo of Mary Youngblood

The Power of Music

Listening to music has been found to reduce stress levels, improve concentration, supercharge brain power, and boost creativity.



Movement Time

Children practice koala pose.

Creative Arts: Creative Movement and Dance

SHOW the marked page in *Bubbles*. **ASK** children what they notice.

In *Bubbles*, Kangaroo follows floating bubbles to find Koala. Look at Koala in this picture. What do you notice?

Yes, he is climbing the tree. He’s hugging the trunk with his arms and legs. How would you like to hug a tree like a koala? Let’s do a koala yoga pose!

MODEL koala pose. **GUIDE** children to practice the pose. **ENCOURAGE** them to pretend to blow bubbles.

I start standing with my knees bent. First, I cross one arm over the other and wrap both arms around my chest. My hands hold onto my shoulders. Next, I cross one leg over the other and lower my hips. I’m doing my best to balance. Do I look like a koala hugging a tree?

Now it’s your turn to pose like a koala. Stand up and bend your knees. Cross one arm over the other. Wrap both arms around your chest and hold onto your shoulders. Now bend your knees and cross one leg over the other. Try to balance. Imagine you’re hugging a tree trunk.

Unwrap your arms and legs. Dip your wand in the soap and water mixture. Take a deep breath in, and blow bubbles over to Kangaroo!

Make & Prepare

- Have the book *Bubbles* ready. Mark the page that begins “Koala climbed a tree instead” with a sticky note.
- Familiarize yourself with how to do koala pose on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.

Additional Material

- *Blueprint Yoga*

Talk Time

Children learn to calm down by pretending to blow bubbles.

Social Emotional: Self-Awareness and Self-Concept

SHOW the marked pages in *Bubbles*. **ASK** children how Kangaroo feels and how she calms down.

In *Bubbles* when Koala climbs the tree, Kangaroo walks away. How do you think Kangaroo feels? Why?

Yes, she feels upset because Koala isn’t ready to play with her. What does she do to take care of herself?

Yes, she blows bubbles to calm herself down.

SHOW the “Calm Down Bubbles” and wand.

This is another way we can calm ourselves down, too. Here is a special bubble bottle and wand. You can find them in our Calm Corner. When you feel upset, you can unscrew the lid, take out the wand, and blow pretend bubbles using our “Calm Down Bubbles.”

USE a class puppet to guide children to practice the strategy.

Sayeh, will you show us how?

Sit comfortably and close your eyes. Think about feeling upset. What does it look like? Now dip your bubble wand into the upset feeling. Take a deep breath in, and blow your grumpiness or worry away. You can blow as many times as you need to calm yourself down.

Make & Prepare

- Have the book *Bubbles* ready. Mark the page that begins “Bother…” and the page that begins “Kangaroo sat down…”
- Create “Calm Down Bubbles,” an empty bubble bottle and wand to use as a calming tool.

Additional Materials

- Sayeh and/or Elijah, the social emotional puppets

Model Self-Talk

Instead of acting upon feelings of frustration, model self-talk. You can say, “I am feeling frustrated. I need time to calm down. I’m will pretend to blow bubbles.” Thinking aloud lets children know that strong feelings are natural. Modeling how to exert self-control supports children in developing their executive function.

Before

BLOW a bubble and ask children what shape it is.

We have been exploring bubbles! I’m going to blow one right now, and I was wondering if you could tell me what shape a bubble is.

Yes, bubbles are spheres. Do you know other things are shaped like spheres?

SHOW a ball. PASS it around the group.

Here is another sphere. Let’s pass it around, so everyone gets a chance to look at it and feel it.

ASK children to share what they know about spheres.

- What do we know about spheres?
- Do they have any corners? Edges?

TELL children that they will look at shape examples and determine if they are spheres.

Today we are going to play a game called “Is This a Sphere?” We are going to choose shapes out of a mystery bag [show] and ask “Is this a sphere?” You can use what you know about spheres to answer the question!

During

DRAW yourself holding the mystery bag. DESCRIBE what you are doing and thinking as you draw. INVITE children to contribute.

Here I am holding the mystery bag. Which hand should I hold it in? Inside the bag are several different objects. When we pull one object out of the bag, we are going to answer the question “Is it a sphere?”

Suggested message: “Is this a sphere?”

PAUSE to focus on writing structure (speech bubbles tell who is talking).

In the picture in the message I am talking! I want to know which objects inside the bag are spheres. What can I draw around my words to show that I am talking? Yes! A speech bubble. I will draw a round shape around the words I said. Then I will make the drawing come to a point near my mouth. This shows I am talking.

INVITE children to reread the words with you.

After

INTRODUCE the mystery bag. INVITE volunteers to select an object. ASK “Is this a sphere?” PASS around the object. ENCOURAGE children to answer and explain their thinking. CREATE two yarn circles on the floor. SORT the objects into two groups: spheres and not spheres.

We will use what we know about spheres as we look at objects we pull out of our mystery bag. Then we can sort the objects into two groups: spheres [point to one yarn circle] and not spheres [point to the other]. Ready?

When you get the bag, select one object. Hold the object in your hands to feel and check if it is perfectly round all over. Is this a sphere? How do you know?

RESTATE that spheres are three-dimensional shapes that are perfectly round all over.

Today we looked at several objects and asked: is this a sphere? We sorted the objects. These are all spheres [point]. They are perfectly round three-dimensional shapes. These are not [point].

REREAD the message one more time.

[Transition] TELL children they can create a sphere collection at the math center.

Let’s keep exploring and thinking about things that are spheres. We can make a sphere shape collection basket at the math center. If you find something that is a sphere, add it to our collection!



Make & Prepare

- Create a “mystery” bag with several examples of spheres and non-spheres.
- Cut two lengths of yarn that are long enough (approximately three feet) to create two circles for sorting.

Additional Materials

- Container of bubbles with wand
- Ball to pass around

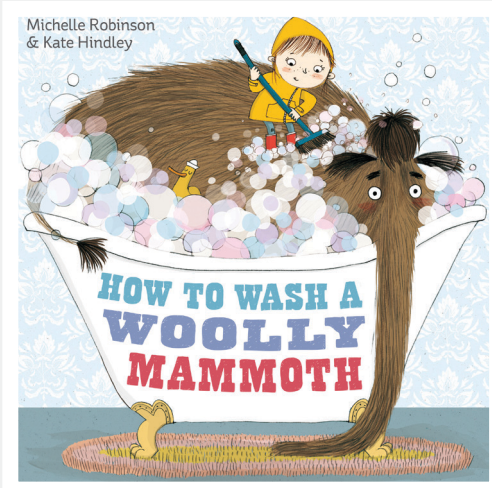
Following Up

This lesson focused on shapes. Observe children when they are in the math or block centers. How do they talk about shapes? Do they use or confuse the names of the shapes?



Keep It Going

- While outside at the playground, invite children to find a sphere. Are there any basketballs? Dodgeballs? Tennis balls? Encourage children to think about all the different types of spheres they found outside. Is one larger than the other? How many did they find?
- Which type of ball bounces the highest? Gather different types of balls (e.g. basketball, bouncy ball, ping pong ball, tennis ball, volleyball). Talk about spheres and how they take up space. Invite children to make a guess about which ball will bounce the highest. Why do they think that? Each child can take turns bouncing the ball they expect to bounce the highest. Together create a chart that lists which ball bounced the highest to lowest.



Make & Prepare

- Download and print an image of a woolly mammoth.
- Review the ASL sign for “I remember” on the *Blueprint* website.

Additional Materials

- Anchor Chart: “Readers Can Say”
- Unit Chart: “Words We Are Learning”

Words We Are Learning

scrub: to clean by rubbing, often with a brush

Responding to Children

Some children may struggle to make connections that are not literal. They may give literal responses, such as, “I give my woolly mammoth a bath too.” Honor children’s effort to relate the book to their own lives. This shows that they are beginning to understand the concept of making a text-to-self connection. Ask guiding questions to help children make more meaningful connections. For instance: “Does the woolly mammoth’s bath remind you of your own life? Who takes a bath in your home?” Then reframe their response. For example: “So, you remember your dad giving your baby sister a bath.”

Michelle Robinson

The author of this book has a website that you can explore, <http://www.michellerobinson.co.uk>. It includes information about the author and her other works as well as activities and other resources.

Before

ACTIVATE children’s background knowledge around bath time.

We have been reading about bubbles and making bubble mixtures.

Who likes to take bubble baths? How do you get ready for your bath at home? What do you do when you are in the bath? What do you do after your bath?

INTRODUCE the book. **INVITE** children to share what they know about woolly mammoths.

Today we are going to read a book about bath time. The title is *How to Wash a Woolly Mammoth*, written by Michelle Robinson and illustrated by Kate Hindley. Have you ever heard of woolly mammoths? What do you know about them?

SHOW image of woolly mammoth. **TALK** about it.

A woolly mammoth is a very large animal with a long trunk for a nose [point]. It has fur like wool [point]. That is why it’s called a woolly mammoth. Woolly mammoths lived a long time ago and now they are extinct. But in this book the girl gives her woolly mammoth a bubble bath!

PROMPT children to sign “I remember” if they make a connection.

If you can remember taking a bubble bath, sign “I remember” [demonstrate].

As we read *How to Wash a Woolly Mammoth*, notice when you make more connections. You can sign “I remember” to show that part of the book reminds you of your own life.

During

PAUSE after “Start scrubbing.” **DEFINE** “scrub.” **ADD** “scrub” to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language). **MODEL** and **GUIDE** children to act out scrubbing.

Can you say “scrubbing”? Let’s find the beats or syllables in that word: scrub-bing. Look at what the girl is doing in the picture. What does it mean to scrub?

Yes, when you scrub, you clean something by rubbing it. Sometimes you scrub with a washcloth or a brush like she is. Let’s add “scrub” to the list of words we are learning. Do you know any words that mean the same thing? Can you pretend to scrub the woolly mammoth with a brush too [demonstrate]?

PAUSE after “A mammoth’s tummy is terribly tickly.” **INVITE** children to share connections. **REMINDE** them to use the sign and sentence stem, “I remember...”

Readers, if you are making a connection, sign “I remember.” If you would like to share how part of this book reminds you of your own life, keep signing. You can say, “I remember...”

PAUSE after “EYES!!!” **INVITE** children to share connections. **REMINDE** them to use the sign and sentence stem, “I remember...”

Does this part of the book remind you of your own life? Readers, if you are making a connection, sign “I remember.” If you would like to share what you remember, keep signing. Say, “I remember...”

After

PROMPT children to sign “I remember” if they also like to snuggle after taking a bubble bath. **MODEL** and **GUIDE** children to act out preparing and taking a bubble bath.

Aw, the girl and her pet are snuggling together! Can you remember snuggling after taking a bath? You can sign “I remember.”

Let’s imagine we are taking a bubble bath! Fill up your tub with water. Pour in some soap. What is this mixture making? Lots of bubbles! Scrub your arm and your other arm. Scrub each of your legs. Now scrub your tummy! Is it tickly like the woolly mammoth’s?

Now that you are all clean, wrap yourself up in a towel. Snuggle yourself with a big hug!

Build Interest

CONNECT to making bubble mixtures. **ASK** children what they know about the color of bubbles. Then **BLOW** a few bubbles from a bubble wand. **ASK** children to observe and describe what they see.

We have been making lots of bubbles [refer to photos and/or science notebooks]. What have you observed about the color of bubbles?

Watch as I blow a few bubbles. What colors do you see?

Build Understanding

SHOW children food coloring.

I wonder if we could change the color of the bubbles in our bubble mixture by adding food coloring. This is food coloring [show]. Have you used this before? How?

DEMONSTRATE how to add food coloring to one cup of bubble mixture. Then **INVITE** a child to blow into the cup of bubble mixture with food coloring. **REFER** to the Anchor Chart: “We Can Describe.”

Here are cups of bubble mixture. We are going to add a drop or two of food coloring to one of the cups. Then we will blow until we make lots of bubbles. We can observe what happens to the bubbles and their color as they flow over the cup and onto the paper.

- What color should we add to this cup of bubble mixture?
- What do you predict will happen?
- Who wants to blow into the mixture? What do you see happening? What happens when you blow harder?
- What color do you see? Is it the same as the food coloring?

INVITE children to add a different color of food coloring to each of the different cups of bubble mixture. **EXCHANGE** the cups, so the second color overflows on the same paper to make a design.

Look! We made a colorful bubble painting!

Build Experience

GIVE each partnership a cup of bubble mixture, straws, and paper. **INVITE** them to choose one color of food coloring to add to their cup and blow bubbles onto their paper, exchanging one color for another when they are ready. **ENCOURAGE** them to make predictions and observations. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own bubble painting. Choose one of the cups of bubble mixture with food coloring. Use your straws to blow. Watch as the bubbles spill over the cup and onto your paper. When you are ready for another color, place it in the center of the table to exchange it for a new color.

REFLECT on changing the color of the bubbles and making a bubble painting.

Today we made colorful bubble paintings. Let's discuss.

- What happened when the bubbles mixed on the paper?
- Did the bubbles pop on your paper?
- What sound did the bubble pops make?
- Were you able to separate the different bubbles? Why or why not?
- What other questions do you have?

Make & Prepare

- Each child will need one straw. Think about where children will hold the straws as they blow into them. Poke a hole just below where you think their fingers will rest. This will prevent children from being able to suck in the bubble solution.
- Prepare small cups of the bubble mixture ahead of time, at least one per partnership. Paint cups work well because they are sturdy and won't tip over. Children will add eyedroppers of food coloring to the bubble solution.
- Cover the table with newspaper or a reusable table cloth for easy clean up.

Additional Materials

- Photos of children at work making mixtures
- Container of bubbles with bubble wand
- White construction paper
- Food coloring
- Eyedroppers
- Smock (one per child)
- Anchor Chart: “We Can Describe”

Build Background Knowledge

Review color words.



Stretch their Thinking

Invite children to mix together two different colors of the food coloring before blowing bubbles.

Listen/Look For

- What do children notice as they use the different color bubble mixture?
- How do children describe the colors?

Support Children's Inquiry

Remember, these activities were designed to support children's curiosity and inquiry. Encourage them to make predictions, brainstorm, and experiment with their ideas.

Teacher Preparation

Mixture activities offer children hands-on opportunities for observations and exploration. As you work with different materials in this unit and set up investigations, being prepared and organized will help lessons run smoothly. In addition, keep in mind ways to work safely, including: keeping materials out of reach, stating clear and concise directions, and washing hands.

Greeting Time

Children float to instrumental music and dance with a partner.

Creative Arts: Creative Movement and Dance

SHOW bubbles sticking together on the cover of *Bubbles*. **INVITE** two children to model how to face each other, hold hands, and turn around together.

We have been floating like bubbles and listening to Native American flute music by Mary Youngblood [show photo].

As we know, sometimes bubbles stick together [show book]. Can we have two volunteers to pretend to be two bubbles sticking together?

Stand facing your partner and hold hands. Keep holding hands and turn around in a circle slowly and gently like this [demonstrate] as the music plays.

When the music stops, gently let go of your partner's hands and float back to your spot. Get your body ready to float like a bubble!

PLAY 15 seconds of instrumental music, as children stand up and spin with a partner. INVITE them to choose another partner and repeat.

Now that you have floated back to your circle spot, let's all pop. Pop! Relax your body.

Make & Prepare

- Cue up an audio sample of Native American flute music by Mary Youngblood.

Additional Materials

- Photo of Mary Youngblood
- The book *Bubbles*

Movement Time

Children practice woolly mammoth pose.

Creative Arts: Creative Movement and Dance

SHOW the cover and first page of *How to Wash a Woolly Mammoth*. **ASK** children what they notice.

There are lots of bubbles in *How to Wash a Woolly Mammoth*. Look at this picture of the mammoth. What do you notice?

Yes, it is a very large animal with a long trunk, like an elephant. It has fur like wool [point]. That is why it is called a woolly mammoth. How would you like to be a woolly mammoth? Let's do a yoga pose!

MODEL woolly mammoth pose. **GUIDE** children to practice it. **INVITE** them to spray water with their trunks.

I stand and step my feet out wide. Next, I connect my hands and imagine that my arms are my long trunk. Then I lean forward and swing my trunk from side to side. Maybe I stomp my big, heavy feet as I swing. Do I remind you of a woolly mammoth?

Now it's your turn to pose like a woolly mammoth! Stand up and step your feet wide. Connect your hands to make your long trunk. Lean forward and swing your trunk from side to side, stomping your feet. Do you feel like a woolly mammoth?

Use your trunk to get some water from the tub: slurp! Now stand and spray it: swoosh!

Make & Prepare

- Familiarize yourself with how to do woolly mammoth pose on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.

Additional Materials

- The book *How to Wash a Woolly Mammoth*
- *Blueprint Yoga*

Family Engagement

Invite children to do yoga at home with their families. Send copies of the yoga poses you practiced home. Directions are located in the back of this unit guide.



Talk Time

Children recognize uppercase letters.

Literacy: Phonological Awareness

CONNECT to initial sounds in “bubbles” and “mammoth.” **SHOW** magnetic uppercase letters *B* and *M*.

What sound do you hear at the beginning of the word “bubbles?” Yes, /b/. What letter makes that sound? Yes, the letter *b* [show]. What sound do you hear at the beginning of the word “mammoth?” Yes, /m/. What letter makes that sound? Yes, the letter *m* [show].

PLAY the game, “I’m Thinking of an Uppercase Letter.” **WRITE** a vertical line. **INVITE** children to guess which letter it could be. **AFFIRM** their thinking.

Let's play a game of “I’m Thinking of an Uppercase Letter.” I will start writing one of these uppercase letters. Look closely, and think about which one I am writing.

Which uppercase letter could I be writing? Why?

WRITE the next part of the letter. **INVITE** children to guess the letter and share their thinking.

The next part of this letter starts at the top and bumps out once. It bumps out again. What letter am I writing? How do you know?

Yes, this is an uppercase letter *B*. Let's write the uppercase letter *B* in the air. Start at the top, drop down, bump out, bump out again.

Whose name in our class begins with the letter *b*? What other words do you know begin with the letter *b*?

B is for bubbles!

Materials

- Magnetic uppercase letters *B* and *M*
- Chart paper and markers

Adapt the Lesson

Remember to adapt the lesson to use letters that your children need practice reviewing.

Before

SHOW three different sized balls. **INVITE** children to put the balls in size order. Then **DISCUSS** labeling them with the words “small” “smaller,” and “smallest.”

We learned that bubbles are shaped like spheres. Here are three more spheres [show balls].

Can you place them in size order?

I want to talk about their size. I can use the words “small,” “smaller,” and “smallest” to compare them. Which ball is small? Which ball is smaller than that one? Which is the smallest of them all?

Yes, we can use words like “small,” “smaller,” and “smallest” to compare the size of objects to one another. Watch as I draw and label the three balls with the words that best describe their size.

During

DRAW three balls, each one a different size. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

I want to draw three different sized balls and label them in size order. First, I will draw a small ball. What should I draw next?

Suggested Labels: “small,” “smaller,” “smallest”

PAUSE to focus on vocabulary (labeling the pictures with the correct comparison words).

Here is the third and last ball. I want to label it with the word that describes its size compared to the other balls. Which word makes most sense here? “Small,” “smaller,” or “smallest”? Yes! “Smallest” describes this ball.

INVITE children to reread the labels with you.

After

ASK children to find the labels “small,” “smaller,” and “smallest” in the message. **DRAW** a box around each one.

Today we used the words “small,” “smaller,” and “smallest” to compare balls. Who can find the word “small” in our message? “Smaller”? “Smallest”?

DISTRIBUTE bags of objects to groups of children. **INVITE** children to place the objects in size order. **CIRCULATE** as they work. **ASK** questions to encourage conversation.

Let’s continue using these words to compare. You are going to work in groups to put more objects in size order from small to smaller to smallest. Here are your materials!

- Gestures: Can you point to the smallest object?
- Yes/No: Is this [point] smaller than that one?
- Either/Or: Which is smaller? This [point] or that [point].
- Open-ended: How did you know which was the smallest?

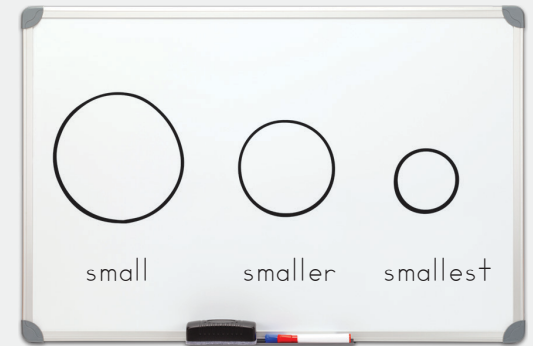
RESTATE that the words “small,” “smaller,” and “smallest” are comparison words.

Today we compared the size of three small objects. We used the words “small,” “smaller,” and “smallest” to describe how they were different in size.

REREAD the message one more time.

[Transition] **INVITE** children to pretend they are holding a small ball, a smaller ball, and the smallest ball.

Let’s pretend we are holding a small ball like this [demonstrate]. Now pretend you are holding a smaller ball. Now pretend you are holding the smallest ball ever!



Make & Prepare

- Create bags with three different sized objects such as pom-poms, index cards, and blocks (one per group).

Additional Materials

- Three different sized balls such as a ping pong ball, tennis ball, and soccer ball



Supporting Multilingual Learners

Teach the word “size” to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children’s home language (use an online translation tool). This will support their comprehension of the thematic content.

Scaffolding in MTP

Invite children to the board to find a letter or a word in the message. You can extend this opportunity to engage with the message by asking children to find something they know. Keep it open-ended! They can come up to the board and point out what they know and how they know it. If they find a letter, draw a circle around it. Follow up by asking what sound the letter makes or what words begin with that sound. If they find a word, draw a box around it. Ask them to show you what the word means or if they know other words that mean the same thing. Use what you know about the child to help move them from what they know to new learning. Of course, if they do not know the answer to a question you ask, offer them the support they need.

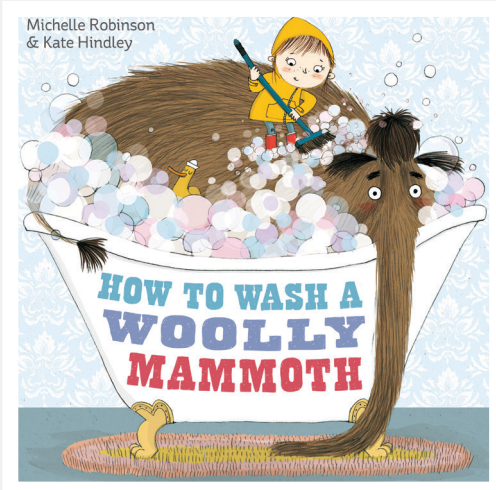
Responding to Children

Are children able to put a set of objects in order according to measurable attributes (e.g., smallest to tallest)? If so, ask children to sort by a new attribute (e.g. lightest to darkest). If not, use smaller sets of objects that are clearly distinct in the target attribute.



Keep It Going

- Compare other objects and dig into precise measurement language. For example, at snack time, compare fruits based on weight: which is heavy? Heavier? Heaviest? At the dramatic play center, compare mixing tools: which is long? Longer? Longest?



Make & Prepare

- Have a marker and chart paper to record tally marks.

Additional Material

- Unit Chart: “Tally Marks”

Vary the Lesson

Give children dry erase boards and markers (or clipboards, paper, and writing tools) to record the tally marks.

Interacting with Children

- Books that are intentionally funny, like *How to Wash a Woolly Mammoth*, support children’s increasing understanding of language and social situations. Children find the book funny because it plays on their understanding on the “right” way to do things. Continue to tickle children’s funny bones by being silly with them at centers and other times of the day. When playing with baby dolls with them, for example, pretend you don’t know how to dress the doll. Put the doll’s coat on backwards and say, “Is this how it goes?”
- This is also the perfect time to play with language by using idioms in context during interactions. Expose children to the idioms used in read alouds, such as “throw-in the towel,” meaning to give up, which is introduced at the end of this book.

Before

ASK what the girl is teaching us how to do. **STATE** that she tells and shows each step.

We read *How to Wash a Woolly Mammoth*. Let’s think more about the title of this book. What is the girl teaching us how to do? Yes, she is teaching us how to wash a woolly mammoth. She tells and shows us, step by step, what she does to give her pet a bath.

PROMPT children to listen for the steps in the book. **EXPLAIN** how we can use tally marks.

As we read this book today, listen for each of the steps. Each time we hear a step in *How to Wash a Woolly Mammoth*, we will draw one tally mark. Then at the end of the book, we can use the tally marks we drew to tell and show how many steps the girl takes to give her woolly mammoth a bath.

REVIEW the Unit Chart: “Tally Marks.”

Before we begin, let’s review our “Tally Marks” chart. Let’s count...

During

PAUSE after “Step one.” **MODEL** drawing one tally mark. **ENCOURAGE** children to “draw” the tally mark in the palm of their hands with their finger.

Here is the first step to giving the woolly mammoth a bath. Let’s draw one tally mark. As I draw it here [point], you draw it on your hand with your finger. Count with me: that’s one.

PAUSE after “Step two.” **INVITE** a child to draw the second tally mark.

Here is the second step. Who can come draw the second tally mark to show two steps? Yes, we draw the second tally mark next to the first one. Did you draw it on your hand with your finger? That’s two.

CONTINUE calling up a child to add tally marks three to five. **HIGHLIGHT** crossing the fifth tally mark.

Here is the fifth step. How do we draw the fifth tally mark? Right, the fifth tally mark goes across these four lines. Who can come draw the fifth tally mark to show five steps? Draw it across the four tally marks on your hand, too. How many steps is that? Five.

PAUSE after “Step six.” **ASK** children how to show the sixth tally mark. **INVITE** a child to start a new set of tally marks beside the first set of five.

Here is the sixth step. How do we draw the sixth tally mark? Right, we need to start a new set of tally marks now. Why? Because tally marks show one to five, and six is one more than five. So, who can come draw the first line of a new set of tally marks? Draw it on your hand.

CONTINUE calling up a child to add tally marks seven to 10. **HIGHLIGHT** crossing the fifth tally mark.

After

ASK children how many steps there are and how they know.

The girl tells and shows us, step by step, how to give a woolly mammoth a bath. We tracked each step [point] by using tally marks. How many steps does the girl do? How do you know?

INVITE children to suggest other representations of 10 (i.e. write the numeral “10” or the word “ten,” hold up 10 fingers, use a 10 frame, draw 10 dots, etc.).

How else can we show 10?

Build Interest

CONNECT to using water in bubble mixtures.

Let's think about the bubble mixtures we made. What were some of the materials we have used [refer to photos and/or science notebooks]?

SHOW children the bottle of vinegar. **ASK** what they know about vinegar. **INVITE** them to investigate the vinegar using their sense of sight.

Yes, we used soap and water. We have used water in many of our mixtures. Today we are going to use a different liquid. This is vinegar [show]. Have you ever heard of vinegar before? Does someone in your house use it?

Yes, it is used for cooking and even cleaning. Let's observe it! What do you see?

OPEN the bottle of vinegar and carefully use your hand to waft the scent of vinegar for children to smell.

I'm going to open the bottle [open] and gently wave my hand over it. What do you smell?

We think the vinegar looks [descriptive words] and smells [descriptive words].

Build Understanding

SHOW children the baking soda. **INVITE** them to observe it (but not tasting).

Today we are going to use baking soda [show]. Have you ever heard of baking soda before? Does someone in your house use it?

Let's observe it. Here is some baking soda [distribute prepared cups of baking soda]. What do you notice? What does it feel like?

Yes, it is powdery like cornstarch or flour.

INVITE children to make predictions about mixing baking soda and vinegar.

What do you think will happen if we combine the baking soda and the vinegar?

COLLABORATE with children to set up the investigation. **PLACE** a cup on a tray. **INVITE** a child to measure $\frac{1}{2}$ cup of baking powder and pour it into the cup. Then **INVITE** a child to add an eyedropper full of vinegar to the cup of baking soda. **REFER** to the Anchor Chart: "We Can Describe."

Now that we made some predictions, let's get ready to investigate.

- Who will place a cup on this tray [point]?
- Now we need to scoop $\frac{1}{2}$ cup of baking soda and pour it into the cup. Who would like to help?
- It is time to add vinegar! Who would like to add an eyedropper full of vinegar to the cup of baking soda?
- What do you see happening? What do you smell? How would you describe what is happening?

Build Experience

INVITE children to take turns adding an eye dropper full of vinegar to the mixture cup. **ASK** children to describe what they observe.

Let's each take a turn adding an eye dropper full of vinegar to the mixture and then observing. What happens? Is it the same kind of reaction or different?

REFLECT on today's bubble investigation with vinegar and baking soda.

Today you made bubbles with baking soda and vinegar. Let's discuss.

- What happened? How would you describe this mixture and the bubbles it makes?
- Do you think you could separate the mixture? Why or why not?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Vinegar and Baking Soda" to children's science journals (one per child).
- Add a teaspoon of baking soda to a small cup (one for each child).
- Prefill several eyedroppers full of vinegar (at least one per child).
- Cover the table with newspaper or a reusable table cloth for easy clean up.

Additional Materials

- Photos of children at work making mixtures
- Baking soda
- Vinegar
- $\frac{1}{2}$ cup measuring cup
- Tray
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools

Build Background Knowledge

Connect to bubbles in cooking. Ask children where else they see bubbles.



Stretch their Thinking

Connect back to the other powders used in small groups. Invite children to try adding vinegar to other powders.

Listen/Look For

- How do children describe this mixture?
- What do children notice about these bubbles? Do they compare them to other bubbles made?

Safety Tip

Be cautious with the vinegar. Do not let it get in children's eyes. Make sure you are the one handling the liquid.



Growing Scientists

What do you think will happen next? This is a key question scientists ask themselves. When children make predictions, they are thinking about what is going to happen based on what they know and or what they have seen. Their background knowledge may not be extensive, but experience will yield stronger predictions.

Interacting with Children

Children are naturally curious. In this lesson, we ask, "What questions do you have?" to directly address this aspect of children's thinking. When working and playing with children be sure to continue to invite children to share their questions.

Greeting Time

Children float to instrumental music and dance in groups of three.

Creative Arts: Creative Movement and Dance

SHOW bubbles sticking together on the cover of *Bubbles*. **INVITE** a group of three children to model how to hold hands and turn around together.

Scientists, we have been working with bubble mixtures. As we know, bubbles can be sticky! Today we are going to stick together in a group of three!

Here is a group of three children [point]. Imagine that you are three bubbles sticking together.

Hold hands with your partners, and turn around in a circle slowly and gently as the music plays.

When the music stops, gently let go of your partners and float back down to your spot.

Get your body ready to float like a bubble!

PLAY 15 seconds of instrumental music, as children turn around in their groups. INVITE them to choose two other partners and repeat.

Now that you have floated back to your circle spot, let's all twirl one time... and pop! Relax your body.

Make & Prepare

- Cue up an audio sample of Native American flute music by Mary Youngblood.

Additional Materials

- Photo of Mary Youngblood
- The book *Bubbles*

Movement Time

Children practice yoga poses using ordinal numbers.

Math: Numbers and Number Sense

REVIEW the kangaroo, koala, and woolly mammoth poses. **REFER** to the book *Blueprint Yoga*.

We just danced like bubbles in groups of three. Also, we have practiced three yoga poses from our bubble books. What poses did we do?

Yes, we practiced kangaroo, koala, and woolly mammoth poses. Let's do all three yoga poses today!

ASK children which one we should do first, second, and third. HIGHLIGHT the ordinal numbers by holding up one, two, and three fingers. INVITE a child to demonstrate each pose.

Which one would you like to do first? Who can show us how to do the pose?

Which pose should we do second? Who can show us how it goes?

Which yoga pose should we do third? Who can remind us how to do it?

RECAP the order of the poses chosen by children. MODEL and GUIDE them to do each one.

Okay, now let's all do the poses in the order we planned. First... Second... Third...

Make & Prepare

- Review the kangaroo, koala, and woolly mammoth yoga poses. Be ready to model, or prepare another adult or child to do so.

Additional Material

- *Blueprint Yoga*

Did You Know?

An ordinal number tells you the position of something in a list – first, second, third, etc. Cardinal numbers tell you how many of something you have (e.g. 1, 2, 3). You could write 1st, 2nd, 3rd to show that numbers that show place (ordinal) are written differently than numbers we use to count (cardinal numbers) for children who are ready to be exposed to them.

Talk Time

Children discuss the results of a survey.

Math: Measurement and Data

REFER to the survey. **DISCUSS** the results.

Earlier we voted on whether or not we would want a woolly mammoth for a pet. You put a tally mark for "yes" or "no." Here are the results.

How many children want a woolly mammoth for a pet? How can we find out?

How many children do not want a woolly mammoth for a pet? How can we find out?

Did more children want to have a woolly mammoth for a pet or not? How do you know?

INVITE children to explain their reasoning.

Who wants to share why they wanted a woolly mammoth for a pet?

Who wants to share why they don't?

Make & Prepare

- Create a chart where children can use tally marks to vote on whether or not they want a woolly mammoth for a pet. Make sure children vote before Talk Time.

Additional Materials

- The book *How to Wash a Woolly Mammoth*

Supporting Individual Learners

Be sure to clearly explain what each section is in a graph (e.g., these are the VOTES; This is the group of children who WANT a woolly mammoth for a pet, and THIS section shows how many children do NOT want a woolly mammoth for a pet).

Before

REVIEW the letters on the letter ring in a different order. **ASK** children what the letter name is and what sound the letter makes. Then **CONNECT** to the book *How to Wash a Woolly Mammoth*. **SHOW** the marked page. **POINT OUT** the umbrella.

Take a look at this page from our book *How to Wash a Woolly Mammoth*. The splash from the woolly mammoth was so big that she had to stand under an umbrella. Would you be unhappy to get splashed like that? We would have to put our umbrellas up to stay dry!

FOCUS on words that begin with the /u/ sound.

Under, umbrella, unhappy. What sound do you hear at the beginning of these words [hold hand up to your ear]? Yes, /u/. Does anyone in our class have a name that begins with the /u/ sound?

DESCRIBE how to form the *letter u* as you write the letters in the corner of your board. **INVITE** children to skywrite the letters. Optionally, teach the ASL sign.

The *letter u* makes the /u/ sound. To write an uppercase *letter U*, I start at the top and curve down. Then I curve up. Now you write it with your finger in the air. This is the lowercase *letter u*. I curve down, curve up, and then drop down. Now you try it. While I write today, please look for the *letter u*. We are going to learn how to read it together.

During

DRAW a picture of two umbrellas. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

Here are two umbrellas. Should the handles be straight or curved?

Suggested message: “Umbrellas up!”

PAUSE to focus on phonological awareness (/u/ in the word “umbrellas”).

I hear the /u/ sound in the beginning of the word “umbrellas.” The *letter u* makes the /u/ sound. Watch me as I write the uppercase *letter U*. I start at the top and curve down. Then I curve up. Now you try it.

REPEAT with the lowercase *letter u* in the word “up.” After, **INVITE** children to reread the message with you.

After

INVITE children to find all the *letter u*'s in the message. **CIRCLE** them.

Let's find all the *letter u*'s. Put on your “I spy” goggles like this [demonstrate], and look for the *letter u*! Who wants to point to one in the message?

Play “Look Like the Letter.” MODEL and then **INVITE** children to make a *letter u* with their arms when they hear a word that begins with the /u/ sound.

We can make our body look like the *letter u*, like this [demonstrate]. Do I look like a *letter u*? How do you know? Everyone stand up and make your arms into the shape of the *letter u*. Now let's sit back down and get ready to play a game.

When you hear a word that begins with the /u/ sound, stand up and make the *letter u* in the air with your arms. If the word I say doesn't start with the /u/ sound, stay seated. Try it with me! The word is “up.” What should we do? /u/, “up” begins with the *letter u*. Let's stand up and make a *letter u* in the air with our arms! Great! Now let's sit back down.

RESTATE the name and sound of the *letter u*.

Today we listened to the sound the *letter u* makes, talked about what it looks like, and found it in our message. We learned that “umbrella” has the /u/ sound at the beginning.

REREAD the message one more time.

[Transition] **ASK** children to pretend to open up an imaginary umbrella and make the /u/ sound.

We usually use an umbrella when it rains. Pretend to open your umbrella and practice the /u/ sound! /u/, /u/, /u/.



Make & Prepare

- Review the standard pronunciation of the short /u/ vowel sound on the *Blueprint* website.
- Familiarize yourself with the ASL sign for the *letter u* on the *Blueprint* website.
- Letter Ring – write the uppercase *letter U* on one side of an index card and the lowercase *letter u* on the other; add this to the Letter Ring after the lesson.
- Have the book *How to Wash a Woolly Mammoth* ready. Mark the page that begins “step six” with a sticky note.

Letter Formation

- Uppercase *letter U* — curve down, curve up
- Lowercase *letter u* — curve down, curve up, drop down

A Note about Vowel Sounds

Remember to only focus on the short vowel sound, as these are the vowel sounds children will most likely encounter when reading short, decodable words such as “cut.”

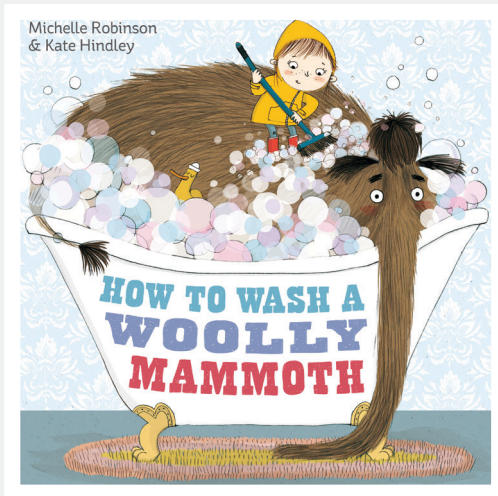
Pronouncing the Sound

When you say the sound /u/, open your mouth and keep your tongue relaxed as it gently rests in your bottom jaw.



Keep It Going

- While children are eating their snack, invite them to use their snack to make the *letter u*.
- Together read through the alphabet strip on the word wall. Can they find the *letter u*? What words start with the *letter u*? Can anyone think of another word to add?
- Provide each child with either an uppercase *letter U* or a lowercase *letter u*. Encourage children to look carefully at the letter, trace the letter with their finger, and say the same of the letter. Can they match the lowercase letter to the uppercase letter? What do they notice about the uppercase and lowercase letters? How are they the same? How are they different?



Materials

- Anchor Chart: “Power of 3”
- Anchor Chart: “Feelings”

Connections to Other Units

In Unit 2: “Healthy Kids” we focused on ways we can take care of our bodies. Healthy habits include taking a bath, washing our hands, and brushing our teeth.

Supporting Individual Children

Self-care is an important part of being a healthy kid. Support children by using pictures to illustrate the steps in the process of any self-care routine. Children may need to practice these steps over and over before they can do it independently.

Caring for Pets

If you have a class pet, discuss how children help to take care of it. You can also invite children to share about how they care for their pets at home. Be sure to include stuffed animals and toy animals in centers, so that children have varied opportunities to act out caring for animals.

Before

DISCUSS how the girl takes care of the woolly mammoth by giving him a bath.

In *How to Wash a Woolly Mammoth*, the girl gives the woolly mammoth a bubble bath! That is one way she takes care of her pet. How does giving her pet a bath help take care of him?

We know it is important to take care of our bodies and stay healthy. Even though washing such a large and furry animal can be tricky, the girl wants her pet to stay clean and healthy.

CONNECT to the Power of 3. **SET THE FOCUS:** Notice how the girl takes care of the woolly mammoth.

The girl takes care of the woolly mammoth because her pet is a special friend. Take a look at our “Power of 3” chart. What are some ways we take care of each other?

Yes, we can play together, be helpful, act kindly, and think about how each other feels.

As we read *How to Wash a Woolly Mammoth*, notice how the girl takes care of her pet.

During

PAUSE after “Fig. 4: Heavy-duty crane.” **ASK** children why the girl keeps trying to get the woolly mammoth in the tub.

The girl tries different ways to get the woolly mammoth into the tub. What does she do? When it doesn’t work on the first, second, or third try, why doesn’t she give up?

Yes, because she cares about her pet. She knows it is important for him to be clean and healthy. So, even though it is challenging, she keeps trying to be helpful.

PAUSE after “A mammoth’s tummy is terribly tickly.” **DISCUSS** how the mammoth feels. **ASK** how she is taking care of her pet.

How is the girl taking care of her pet? Yes, she is making sure he is clean, but they are also playing together.

How do you think the mammoth feels when the girl tickles his tummy? You can check the “Feelings” chart to help you. Yes, maybe he feels silly because he is laughing. Can you make a silly expression too? Do you like to be silly?

PAUSE after “Oh dear.” **DISCUSS** how the mammoth feels. **ASK** how she is taking care of him.

What happened to the mammoth? Yes, shampoo got in his eyes. How do you think he feels? Maybe it hurts, and he is upset or scared. How is the girl taking care of him?

She is thinking about his feelings. She cares about him and wants him to feel better.

PAUSE after “Step Eight…” **ASK** children how she is taking care of her pet. **INVITE** them to think about other ways she could solve the problem.

What is the problem? The woolly mammoth is stuck up in the tree. How does the girl take care of her pet? She helps him get down by letting him land safely on a bouncy trampoline.

That is one kind way to solve the problem. How else could she have solved this problem?

After

CONNECT to Power of 3: “Treat living things carefully.” **ASK** children how else the girl can take care of her pet.

The girl practices the Power of 3, just like we do! She takes care of her pet because she cares about him. She shows us how she treats living things carefully.

Besides giving him a bath, what are some other ways she can take care of her pet?

Build Interest

SHOW children that the bubble wand is missing from the container of bubbles. **INVITE** them to help you solve this problem. **CHART** their ideas.

We have been making bubble mixtures and investigating the bubbles they make. I have used this container of bubbles to blow bubbles for you to observe. When I went to open the bubble container today, I noticed the wand was missing! How are we going to blow bubbles from the bubble container without a wand?

I wonder how we can solve this problem. What do you think?

Build Understanding

DISCUSS children's thinking. **ADAPT** the lesson to match children's ideas.

Yes, one way to solve this problem is to make another bubble wand!

When scientists have a problem, they think carefully about it and use what they know to help solve it! We know that to blow bubbles from this container, you need something to dip in and hold some of the bubble mixture.

SHOW collection of materials. **INVITE** children to browse through them. **DISCUSS** how they can use these materials (or others they think of) to make a bubble wand.

Here are some materials we can use [point]. Take some time to browse through the materials. How can you make a bubble wand using some of these materials?

Build Experience

INVITE children to make a plan. **USE** what you know about each child's language skills to include and extend participation.

Now that we have generated some ideas, take some time to make a plan. You can draw your plans in your science journals.

- **Gesture:** Show me how you want to begin. Show me the shape you want to make. Oh look! You are [adding a piece of string, tape, etc.]. Let's try it! I wonder if [model observing and formulating questions].
- **Yes/No:** Did you make your bubble wand into a [name shape]? Did you include a handle? Let's try it. Does this wand allow you to blow bubbles? Should we try something else? Does this help?
- **Either/Or:** Are you making your bubble wand [name shape] or [name another shape]? Let's try it! Does this bubble wand allow you to blow bubbles, or should we try something else?
- **Open-ended:** How will you begin? How did you make your bubble wand? What shape did you make it? Why? What other materials could we use to make a bubble wand?

GIVE children time to work on creating their bubble wand and testing to see if it works. **ENCOURAGE** them to discuss their work and what they observe. Then **SUMMARIZE** children's work.

Today we wanted to make a new bubble wand to replace the one that was missing.

- We wondered... [restate any questions children had].
- We discovered... [restate observations children made].

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Help! The Bubble Wand Is Missing" to children's science journals (one per child).
- Download and print a picture of a bubble wand.
- Create a collection of materials for children to tinker with as they explore what might make a good bubble wand and why. Add pipe cleaners, yarn, sticks, straws, etc.

Additional Materials

- Container of bubbles, wand removed
- Chart paper
- Markers
- Science journals
- Writing tools

Build Background Knowledge

Connect to other experiences where children have had a problem that needed a solution, such as fixing a broken bucket handle from Unit 3.



Stretch their Thinking

Invite children to test out the wands using bubble solution. Are the bubbles they blow from the wand always in the shape of spheres?

Listen/Look For

- What do children understand about the function of the bubble wand?
- What ideas do children have to problem solve?
- What questions do children have as they work?



Robust STEM Activities

The purpose of this lesson is to have children work as problem solvers. Children may decide to create something new that doesn't resemble a bubble wand. The best problem, of course, will be the most authentic one. So if something is truly missing in your classroom, give children the opportunity to work on replacing that item with one they create.



Mixture Safety

Make sure to continually review ways children as scientists can practice safety during the mixture investigations. Explain that scientists are always careful. Remind children that they should not put any materials in their mouth.

Document Their Learning

Take photos of children working. These will be useful for helping them recall all that they've done and to make comparisons.

UNIT 6

WEEK

3

Be Sure To...

- Offer children multiple opportunities and materials to mix colors and observe how they change.
- Ask children to make associations between colors and objects and/or colors and feelings.
- Teach the *letters i and c*.

Materials

- Materials for a new sensory bottle (see Day 11: Talk Time)
- Squeeze bottles
- Gloves for children
- Shaving cream
- Food coloring
- Celery and Cereal
- Resources such as magazines and brochures that feature items children can use in mixtures
- Paint swatches of different shades of green and yellow

Books

- *Monsters Love Colors*
- *White Rabbit's Colors*
- *Green*
- *The Mixed-Up Truck*
- *How to Wash a Woolly Mammoth*
- *Blueprint Songbook*

Charts

- Anchor Charts:
 - “We Can Describe”
 - “Readers Can Say”
 - “Feelings”
- Unit Charts:
 - “Words We Are Learning”
 - “Color Mixing”
 - “I Spy Mixtures”

How can we make and mix colors?

Mixing colors changes them. They can get lighter or darker or change altogether.

Using a variety of materials such as paint, shaving cream, and sand, children learn how colors mix and explore shades of colors. They explore how colors can make us feel, and learn about the famous abstract artist Wassily Kandinsky. They investigate the *letters i and c* and learn a new strategy for calming themselves down using colors. They also begin working on this unit's class book.

Keep In Mind

In Week 4, you have two opportunities to invite families into the classroom to celebrate children's learning—they can come to hear the class book and/or join in a lemonade tasting. Send out invitations so families can prepare accordingly. Create your own or download and print samples from the Blueprint website.



Words We Are Learning

scribble
to draw freely any which way

sizzling
very hot like fire

wacky
silly, strange, or make-believe



Multilingual Learner Anchor Words

- color
- change
- lighter
- darker



From the Songbook

“The Color Song”

This song is used during Greeting Time. Copy the lyrics, and send home to families.



Trips & Visitors

Reach out to local artists or art centers in your area. Invite them to talk to your class about their work.



Working with Families

Post this on your bulletin board: We are working on observing how colors change when mixed together. Children can see a lot of color mixing in the kitchen. What happens to the color of mashed potatoes when you pour gravy on them? What happens to the color of milk when cereal is left in it? Be on the lookout for color changes at meal time.



Remember | <https://clibblueprint.org/resources-tx>

You can find downloads, videos and more on the Blueprint website.

	Day 11	Day 12	Day 13	Day 14	Day 15
Greeting Time	Children learn a colors song. <i>Creative Arts: Music</i>	Children “scribble” as they sing “The Color Song.” <i>Creative Arts: Creative Movement and Dance</i>	Children hop when they name a color in the song. <i>Creative Arts: Creative Movement and Dance</i>	Children hold up a color card when they sing about the color. <i>Creative Arts: Music</i>	Children twirl when they sing about the color on their card. <i>Creative Arts: Creative Movement and Dance</i>
Movement Time	Children pretend to paint on the ceiling with their feet. <i>Creative Arts: Creative Movement and Dance</i>	Children practice rainbow pose. <i>Creative Arts: Creative Movement and Dance</i>	Children pretend to paint a rainbow. <i>Creative Arts: Creative Movement and Dance</i>	Children act out mixing colors. <i>Creative Arts: Creative Movement and Dance</i>	Children act out mixing colors with a partner. <i>Creative Arts: Creative Movement and Dance</i>
Talk Time	Children participate in making a sensory bottle. <i>Science: Scientific Inquiry and Practices</i>	Children observe and discuss a painting by Wassily Kandinsky. <i>Creative Arts: Art Appreciation and Attitudes</i>	Children combine the onset and rime in words. <i>Literacy: Phonological Awareness</i>	Children practice “Calm Color.” <i>Social Emotional: Self-Awareness and Self-Concept</i>	Children compare different shades of yellow. <i>Creative Arts: Visual Arts</i>
Message Time Plus	Children learn about the <i>letter i</i> . <i>Literacy: Phonological Awareness</i>	Children make color predictions. <i>Science: Scientific Inquiry and Practices</i>	Children begin work on a class book. <i>Literacy: Writing</i>	Children learn about the <i>letter c</i> and its hard sound. <i>Literacy: Phonological Awareness</i>	Children learn about the <i>letter c</i> and its soft sound. <i>Literacy: Phonological Awareness</i>
Intentional Read Aloud	Children “scribble” and name different colors. <i>Creative Arts: Visual Arts</i>	Children tell how the rabbit experiments with colors. <i>Literacy: Comprehension</i>	Children discuss what different colors make them think or feel. <i>Creative Arts: Art Appreciation and Attitudes</i>	Children discuss the names of different greens. <i>Creative Arts: Visual Arts</i>	Children describe and compare different kinds of green. <i>Creative Arts: Visual Arts</i>
Small Group	Children mix primary colors of paint. <i>Science: Scientific Inquiry and Practices</i>	Children make a shaving cream mixture. <i>Science: Physical Sciences</i>	Children make a sand mixture. <i>Science: Physical Sciences</i>	Children mix and make darker shades of green. <i>Science: Scientific Inquiry and Practices</i>	Children mix and make lighter shades of green. <i>Science: Scientific Inquiry and Practices</i>
Reflection Time	What is your favorite color? Why?	If Kandinsky came to our classroom, what would you ask him?	What is your happy color? Why?	What does the color green make you think of? Why?	How can we mix and make colors?

Centers to Launch

See Pages 14-25

Art Center | Ice Painting

Math Center | Building Shapes

Writing Center | I Like the Color...



Greeting Time

Children learn a colors song.

Creative Arts: Music

USE photos of shared experiences to recall recent mixing experiments.

You have been making interesting mixtures [show photos]. What have been some of your favorite ones?

STATE that we will be mixing colors. **MODEL** singing “The Color Song.” Then **INVITE** children to sing along.

We have been mixing powders and bubbles. Now we will be mixing colors. Let’s sing a song about colors!

Blue and yellow

And red too,

Mix them up for something new.

Orange, purple, brown and green,

Every color that you see,

Blue and yellow

And red too,

Mix them up for something new.

Blue and yellow

And red too,

Mix them up for something new.

Can you sing “The Color Song” with me?

Make & Prepare

- Familiarize yourself with “The Color Song” [Sung to the tune of “Twinkle Twinkle Little Star”] on the *Blueprint* website.

Additional Material

- Blueprint* Songbook



Supporting Multilingual Learners

Explicitly teach the word “color” to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children’s home language (use an online translation tool). This will support their comprehension of the thematic content.

Movement Time

Children pretend to paint on the ceiling with their feet.

Creative Arts: Creative Movement and Dance

ACTIVATE children’s experience with painting.

We use colors at the art center. What color paints do you like to use? What tools do we use?

Sometimes we use paint brushes [show] that we dip in paint [use gestures to mimic dipping a paintbrush in paint].

GUIDE children to lay down on their backs, dip their toes in pretend paint, and use their feet to create a picture on the ceiling. **ENCOURAGE** them to picture the colors they are using.

Would you like to pretend to paint a picture on the ceiling [point]? But instead of using a paintbrush [show], let’s use our feet [point].

Make space around your body and lay down with your feet on the floor. Think about what color you would like to use first. Dip your toes in the paint: dip, dip! Now reach your foot straight up to the ceiling. Use your foot to paint with your color. Think about what you are painting.

Can you make a letter? A number? Can you draw a shape? What else can you paint?

Now switch to the other foot. Choose a new color of paint. Dip your toes, and add to your picture. Imagine you can see what it looks like!

Materials

- A paintbrush

Being Creative

A big part of being creative is using your imagination. To support and enhance children’s ability to make believe, activate their background knowledge and experience. This gives them a supportive backdrop for further exploring their creativity.

Talk Time

Children participate in making a sensory bottle.

Science: Scientific Inquiry and Practices

STATE that we will make a new sensory bottle. **SHOW** materials.

Scientists like Scientist Ahmed [show photo] use different materials to make mixtures. We just pretended to paint. Now let’s use real colors to make a new sensory bottle for our science lab! Check out our materials...

INVITE volunteers to mix each color of food coloring into a cup of water. **ASK** children to predict what will happen if the two colors are mixed in the bottle.

Who can mix this food coloring into the water?

What do you think will happen when we mix this blue water and yellow water together in this bottle? Why?

INVITE volunteers to hold the funnel and/ or pour each cup of water into the bottle. **DISCUSS** why the water turns green. **ADD** sparkly items. **ENCOURAGE** children to share their predictions before and observations after.

Observe the mixture. What do you notice?

Should we add anything else to our mixture? What do you predict will happen when we add these sparkly items to the green water? Why? Who can help? What do you observe?

What will you do with this sensory bottle in the science lab? Lean and tell a partner!

Make & Prepare

- Gather materials for making a new sensory bottle. For example: reuse a clear plastic bottle (that is empty, clean, sealable, and label-free), a funnel, one cup of blue water (made with food coloring), one cup of yellow water (made with food coloring), and something sparkly such as metallic paper flakes or confetti.
- Clear a space on the floor or a table; use newspaper or a reusable tablecloth to collect spills.

Additional Material

- Photo of Scientist Ahmed

Before

REVIEW the letters on the letter ring in a different order. **ASK** children what the letter name is and what sound the letter makes. Then **CONNECT** to making mixtures and mixing inside a sensory bottle.

Experimenting and exploring mixtures has been interesting! We made a colorful mixture inside of a sensory bottle [show]. What if you could make another mixture? What do you imagine putting in?

FOCUS on words that begin with the /i/ sound.

Interesting, in, if, imagine. What sound do you hear at the beginning of these words [hold hand up to your ear]? Yes, /i/. Does anyone in our class have a name that begins with the /i/ sound?

DESCRIBE how to form the *letter i* as you write the letters in the corner of your board. **INVITE** children to skywrite the letters. Optionally, teach the ASL sign.

The *letter i* makes the /i/ sound. To write an uppercase *letter I*, I start at the top and drop down. Then I make a bridge on top and a bridge on the bottom. Now you write it with your finger in the air. This is the lowercase *letter i*. I drop down, make a dot. Now you try it. While I write today, please look for the *letter i*. We are going to learn how to read it together.

During

DRAW a picture of a bottle. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

Here is a sensory bottle. What is inside of it? What interesting mixture might I make?

Suggested message: “It was colorful inside.”

PAUSE to focus on phonological awareness (/i/ in the word “it”).

I hear the /i/ sound in the beginning of the word “it.” The *letter i* makes the /i/ sound. Watch me as I write the uppercase *letter I*. I start at the top and drop down. Then I make a bridge on top and a bridge on the bottom. Now you try it.

REPEAT with the lowercase *letter i* in the word “inside.” After, **INVITE** children to reread the message with you.

After

INVITE children to find all the *letter i*'s in the message. **CIRCLE** them.

Let's find all the *letter i*'s. Put on your “I spy” goggles like this [demonstrate], and look for the *letter i*! Who wants to point to one in the message?

PLAY “Sign for the Sound.” **ASK** children to sign “yes” if a word that you say begins with the /i/ sound or “no” if it does not.

We are becoming experts in the *letter i*. Let's practice listening for words that begin with the /i/ sound. I'll say a word. If the word starts with the sound /i/, sign “yes” [demonstrate]. If the word does not begin with /i/, sign “no” [demonstrate]. Let's try one together: the word is “imagine.” What should we do? Yes, the word “imagine” does begin with /i/, so we should all sign “yes.”

CONTINUE playing. Then **RESTATE** the name and sound of the *letter i*.

Today we listened to the sound the *letter i* makes, talked about what it looks like, and found it in our message. We learned that “inside” begin with the /i/ sound.

REREAD the message one more time.

[Transition] **ASK** children to pretend to hold a mixing bowl and add something in, practicing the /i/ sound.

Pretend you are holding a mixing bowl and you are going to add something in! /i/, /i/, /i/, in.



Make & Prepare

- Review the standard pronunciation of the short *letter letter i* vowel sound on the *Blueprint* website.
- Familiarize yourself with the ASL sign for the *letter i* on the *Blueprint* website.
- Letter Ring – write the uppercase *letter I* on one side of an index card and the lowercase *letter i* on the other; add this to the Letter Ring after the lesson.

Additional Material

- Sensory bottle from Day 11: Talk Time

Letter Formation

- Uppercase *letter I* – drop down, make a bridge on top, make a bridge on the bottom
- Lowercase *letter i* – drop down, dot

Short Sound

Vowels have at least two sounds, which are commonly referred to as the short and long sounds. When introducing vowels, always begin with the short sound. These are the vowel sounds children will most likely encounter when reading short, decodable consonant-vowel-consonant (CVC) words, like “bit.”

Pronouncing the Sound

When you say the sound /i/, relax your lips and raise your tongue in the back, so it touches your teeth.

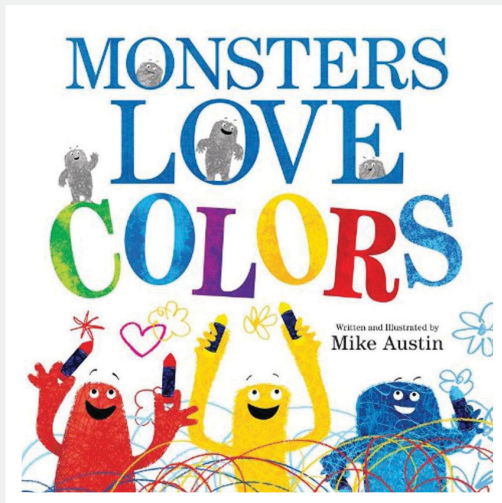


Using Your Letter Ring

Your letter ring can be used as an engaging transition tool. You can show two cards and ask a child to point to the card that shows a specific letter. You can show a letter on your letter ring and invite children to pretend write it on their palm or the floor. You can show a letter and invite children to stand up if their name begins with that letter.

Keep It Going

- Provide children with modeling clay. Using their hands, invite them to roll the clay to create the lowercase *letter i* (don't forget the dot).



Make & Prepare

- Large sheet of white paper
- Several crayons of each color in the book: red, orange, yellow, green, blue, purple

Additional Material

- Unit Chart: “Words We Are Learning”

Words We Are Learning

scribble: to draw freely any which way

Scribbling is a Stage of Writing

The act of scribbling is a valuable step in children’s writing and drawing development. When children scribble, they are gaining experience and confidence in using a writing or drawing tool. This helps develop fine motor skills, such as hand-eye coordination, proper pencil grip, and manual dexterity. These skills provide a strong foundation for forming intentional lines and shapes, as in letters and words.

Keep It Going

- Many museums have online works of art. Try searching for “#MetKids” or “Tate Kids”. You can also visit art related websites created by world-renowned museums:
 - <https://www.metmuseum.org/art/online-features/metkids/>
 - <https://www.tate.org.uk/kids>



Before

SHOW the cover. **ASK** children what they notice.

We are going to read a book called *Monsters Love Colors*, written and illustrated by Mike Austin. Look at the front cover. What do you notice?

These three monsters are different colors: red, yellow, and blue. They are drawing with crayons. What are they drawing?

EXPLAIN what it means to scribble. **ADD** “scribble” to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language). **MODEL** scribbling on paper. **INVITE** children to pretend to scribble on their hands. **PROMPT** them to scribble along with the book.

It looks like the monsters are scribbling. Can you say “scribble”? Let’s find the beats or syllables in that word: scrib-ble. What does it mean to scribble?

When you scribble, you are not trying to draw a specific thing like a flower or house or dog. When you scribble, you are moving your crayon freely any which way. Let’s add “scribble” to the list of words we are learning. Do you know any words that mean the same thing?

I am going to scribble on this paper. Which color crayon should I use?

Can you grab a pretend crayon and scribble on your hand [demonstrate]? When the monsters in this book scribble, you can scribble on your hand, too.

ASK children what they think will happen when different color scribbles mix together.

The monsters in this book are going to scribble with different colors. What do you think will happen when their different color scribbles mix together? Let’s read to find out!

During

PAUSE after “...mix, dance, and wiggle!” **REMIND** children to scribble on their hands.

What are the monsters drawing? They are scribbling. Do you see how they are drawing freely any which way? Choose a color and scribble on your hand!

PAUSE each time a monster says “My favorite color is...” and invite children to chime in and name the color words.

“My favorite color is...” [pause for children to say, “Red!”]

PROMPT children to scribble on the pages that say: “Scribble, scribble, mix, dance, and wiggle!” Then **POINT** to each color monster. **ENCOURAGE** them to say the color words.

Scribble red on your hand. Scribble yellow on your hand. Your scribbling mixed the colors together. “Mixing [point to the red monster] red and [point to the yellow monster] yellow makes [point to the orange monster] orange!”

PAUSE after “I know!” **INVITE** children to guess what color the monster will choose.

What color do you think the monster is going to choose? Say the name of the color on the count of three: one, two, three! Scribble your color on your hand!

ENCOURAGE children to scribble as you read: “Scribble! Scribble! Drip! Splash! Dribble! Mix, mash! Squish, squash, dance, and wiggle!”

Scribble all the colors together. They are mixing. What do you think we will make?

After

INVITE one to four children at a time to choose a crayon and scribble on the paper for a few seconds.

The monsters scribble with different colors. When the colors mix together, they made more colors! How would you like to scribble on this paper, too? Think about what color crayon you will choose. I wonder what it will look like when our scribbles mix together.

ASK children to observe the class scribble and share what they notice.

Let’s observe our class scribble. What do you notice? What colors stand out to you? Who can help post this in the art center?

Build Interest

GUIDE children to warm up their hands and wrists for mixing by doing hand squeezes: **squeeze hands into a fist, count to three, release, and stretch.**

Today we are going to use our hands! Let's warm up our hands and fingers and get them ready. Let's do some hand squeezes. Squeeze your hand into a fist like this [demonstrate]. Let's hold it and count to three. One, two, three. Now, release! Stretch your fingers wide. Wiggle your wrists. Let's do it one more time.

Build Understanding

CONNECT to the book *Monsters Love Colors*. **SHOW** the marked page. **ASK** children what is happening when the monsters "mix, mash, and splash."

We read the book *Monsters Love Colors* [show]. Let's look at a page from our book. What is happening as the monsters "mix, mash, and splash"?

Yes, the colors are mixing and combining to make new colors. We can try that too!

SHOW the materials. **EXPLAIN** the steps: **choose two colors, squeeze paint onto a plate, predict, mix, and observe.** **INVITE** children to collaborate on making the mixture.

Here are the materials we are going to use for our paint exploration [point]. What colors do you see?

Yes, we have red, yellow, and blue. Let's create one mixture together. We can use two colors, just like the monsters in the book.

USE what you know about each child's language skills to include and extend their participation. **REFER** to the Anchor Chart: "We Can Describe."

- Gesture: Which two colors should we use? Point to the [color]. Show me how to squeeze the color out. Use your finger to mix.
- Yes/No: Should we use [color]? Do you want to squeeze the first color onto the plate? Do you want to add the second color? Can you mix with your finger? Show me! Can we unmix, or separate, these colors?
- Either/Or: Is this [color] or [color]? Do you want to squeeze, or do you want to mix? Are these colors mixed together or unmixed?
- Open-ended: What two colors should we use? What do you predict will happen when we mix the colors together? What are you observing? Do you think we can separate the colors?

Build Experience

GIVE each partnership a plate. **INVITE** them to follow the steps: **choose two colors, squeeze paint onto a plate, predict, mix, and observe.** **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own color mixtures. Choose two colors and squeeze some paint onto a plate. Make a prediction. Then mix and observe.

REFLECT on today's mixing experience.

Today you mixed two colors of paint. Let's discuss...

- What happened to the paint?
- What are some different ways you tried mixing the paint?
- Do you think you could separate the colors? Why or why not?
- What other questions do you have?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Paint Colors" to children's science journals (one per child).
- Fill three squeeze bottles with a different color paint (red, yellow, and blue); alternately, children can spoon each of the paints from a bowl.
- Cover the table with newspaper or a reusable tablecloth for easy clean up.
- Mark a page in the book *Monsters Love Colors* where the monsters "mix, mash, and splash."

Additional Materials

- Paper plates (several for each partnership)
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools



Build Background Knowledge

Invite children to share their favorite color! Encourage them to share why they like that color. What other things are that color? Focus on the descriptive language about the color that children use.

Stretch their Thinking

Try adding different amounts of the colors (for example, three squeezes of blue and one squeeze of red). What happens?

Listen/Look For

- How do children describe this action of mixing? What do they notice?
- How do children describe the colors they make?

Add to the Dramatic Play Center

Mixing and pouring are connected. Add more items that children can pour from one container to the next, such as pom-poms, ripped paper, wooden beads, and counters.

Developing Fine Motor Skills

Squeezing hands and squeezing paint bottles are good activities for developing finger and wrist muscles and dexterity. Try combining colors of modeling clay for more practice with fine motor skills.



Mixture Safety

Make sure to continually review ways children as scientists can practice safety during the mixture investigations. Explain that scientists are always careful. Remind children that they should not put any materials in their mouth.

Greeting Time

Children “scribble” as they sing “The Color Song.”

Creative Arts: Creative Movement and Dance

SHOW *Monsters Love Colors*. **REVIEW** what it means to scribble. **MODEL** and **INVITE** children to scribble in their hands as they sing.

In our book *Monsters Love Colors* [show], how do the monsters like to mix up their crayon colors?

They scribble [point to the word on the Unit Chart: “Words We Are Learning”]! What does it mean to scribble?

Yes, when you scribble, you draw freely any which way. Can you grab an imaginary crayon and scribble on your hand?

Let’s pretend to scribble with crayons to mix up the colors we sing about in “The Color Song.”

Blue and yellow

And red too,

Mix them up for something new.

Orange, purple, brown and green,

Every color that you see,

Blue and yellow

And red too,

Mix them up for something new. Blue and yellow

And red too,

Mix them up for something new.

Materials

- The book *Monsters Love Colors*
- Unit Chart: “Words We Are Learning”
- *Blueprint Songbook*

Mixing Science and Art

Show children how the science of mixing can be applied to other areas of interest such as art. By allowing children to explore the concept of mixing from another angle, we appeal to a wider range of learners and creators.

Movement Time

Children practice rainbow pose.

Creative Arts: Creative Movement and Dance

SHOW the picture of the rainbow at the end of *Monsters Love Colors*. **REFER** to rainbow pose in the book *Blueprint Yoga*. **ASK** children what they notice. **POINT** out the way it arches.

Do you love colors like the monsters in this book? At the end, how do they celebrate their love of colors?

Yes, they draw a rainbow! Look at the rainbow page in our Yoga Book. What do you notice?

Yes, a rainbow bends up and over in an arch. How would you like to pose like a rainbow?

MODEL rainbow pose. **GUIDE** children to practice the pose on each side.

Watch as I start on my hands and knees. First, I straighten one leg behind me and plant my foot on the floor. Next, I turn the front of my body to face the side and reach my arm up to the sky. Then I reach my arm overhead and stretch into an arch. Imagine I am a colorful rainbow!

Now it’s your turn to practice rainbow pose. Start on your hands and knees. Straighten one leg and bring your foot flat on the floor. Turn your body to the side. Reach your arm up and then overhead. Stretch into an arch. Do you feel like a colorful rainbow?

Bring your hand and knee back down, and pose like a rainbow on the other side.

Make & Prepare

- Familiarize yourself with how to do rainbow pose on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.
- Have the book *Monsters Love Colors* ready. Mark the page with the rainbow with a sticky note.

Additional Materials

- *Blueprint Yoga*

Talk Time

Children observe and discuss a painting by Wassily Kandinsky.

Creative Arts: Art Appreciation and Attitudes

INTRODUCE the artist Wassily Kandinsky.

We can use all the colors of the rainbow to make art. This is a famous artist named Wassily Kandinsky [show photo]. Let’s find the beats or syllables in the name Kandinsky: Kan-din-sky.

SHOW a picture of the painting. **ASK** children to share their observations.

Here is a picture of a painting that Kandinsky created. What do you notice?

- Are there scribbles?
- What colors do you see?
- What colors do you think Kandinsky mixed together? How do you know?

INVITE children to reflect on and share their thoughts and feelings about the painting.

- When you look at this painting, what does it make you think about? Why?
- How does looking at this painting make you feel? Why?

POST the photo and painting in the art center for inspiration.

Let’s post this photo of Kandinsky and his painting in the art center. Artists can look at other artists’ work to get ideas. What are you excited to create with colors today?

Make & Prepare

- Download and print out a photo of Wassily Kandinsky.
- Download and print out a picture of a Kandinsky painting. Some colorful suggestions are: *Composition IV*, 1911 or *Composition V11*, 1913.

Wassily Kandinsky

We are featuring the Russian artist Wassily Kandinsky [1866-1944]. Kandinsky is considered the pioneer of abstract art. His paintings can spark discussion on the use and mix of colors and shapes. We chose an abstract artist because children could find the art relatable and inspiring. Feel free to feature another artist or style that meets the interests of your children.

Before

CONNECT to mixing. **SHOW** a cup of blue water and a cup of red water. **INVITE** children to make predictions about what color will be created when the two colors are mixed together.

We've discovered that you can mix many different things! We are exploring what happens when we mix colors together. What do you think will happen if we mix these cups of blue and red water together? Let's make some predictions.

We can record our predictions. Watch as I write about what we predict will happen.

During

DRAW a cup of blue water and a cup of red water. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

Here are our two cups of water, one with blue water, one with red water. Lots of us predict the water will turn purple if we mix them together [point].

Suggested message: "We predict the water will turn purple."

PAUSE to focus on phonological awareness (/p/ in the word "purple").

Purple. Say that with me: purple. What sound do you hear at the beginning of the word "purple?" /p/. What letter makes the /p/ sound? Yes, the *letter p* makes the /p/ sound. When I write the lowercase *letter p*, I make a tail and bump out. Now you try writing it with your finger in the air.

INVITE children to reread the message with you.

After

INVITE a volunteer to mix the cups of blue and red water together. **ASK** children to make observations and describe what they see.

I just wrote about our prediction. Okay, scientists! Time to mix! Who wants to help?

What is happening? What color was made when we mixed blue and red water?

REVISIT the prediction. **INVITE** children to share their thinking.

Think back to our prediction. Are you surprised? Why or why not? What are you learning about mixing colors?

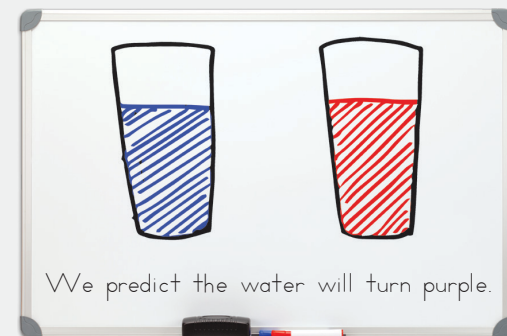
REFLECT on the water mixing experiment.

Today we explored mixing water of different colors. We discovered...

REREAD the message one more time.

[Transition] **TELL** children that they can continue predicting and exploring with mixing colors.

What other colors are you curious about? Try mixing those at the art center!



Make & Prepare

- Using food coloring and clear cups, make one cup of blue water and one cup of red water.

Additional Materials

- Large clear container
- Spoon to mix

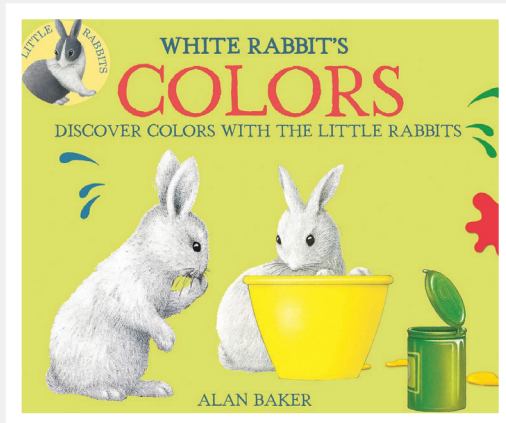
Connecting MTP Lessons

Today you will write the *letter p* when you write the word "purple." If you highlight a different letter today or any day, consult the "Letter and Numeral Formation Guide" on the *Blueprint* website. As you use letters in your message that you have previously taught, take time to invite children to attend to its sound. This quick incidental review reinforces children's phonological awareness. You can also circle the letter to reinforce letter awareness.



Keep It Going

- Join children at the art center. Encourage them to choose two colors of paint to mix together. What is their prediction? Invite them to mix the colors and record what they found. Encourage them to use the color words at the art center to help them write the colors they mixed and the color that it turned after mixing.
- Encourage children to experiment with using more or less of one color to see what happens to the water. For example, if they choose to mix red and blue, invite them to use more blue and less red. Does it make a lighter purple or darker purple? Invite them to use less blue and more red. Place the cups next to one another and compare the colors together. What did they find?



Make & Prepare

- Review the ASL sign for “I predict” on the *Blueprint* website.
- Chart paper and markers: yellow, red, orange, blue, purple, green, brown
- You will be making the Unit Chart “Color Mixing” in this lesson.

Additional Materials

- Anchor Chart: “Readers Can Say”
- Photo of Scientist Ahmed

Color Theory

The three primary colors are red, yellow, and blue. Mixing relatively equal amounts of the primary colors results in the secondary colors: orange, green, and purple. However, there are endless variations of these colors. For example, adding just a few drops of blue to a heaping tablespoon of yellow paint will result in just a tint of green, or incorporating white will lighten the primary or secondary color. These variations are known as tertiary or intermediate colors.

When Children Turn and Talk

Bring the book with you as you listen in on a partnership. Invite children to locate the page and point to the picture that is sparking their thinking. Model referring to specific parts of the book to prompt more conversation or ask further questions.

Supporting Multilingual Learners

Explicitly teach the word “change” to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children’s home language (use an online translation tool). This will support their comprehension of the thematic content.

Before

CONNECT to experimenting with colors. **SHOW** the cover. **ASK** children what they notice.

We have been experimenting with mixing colors. Today we will read a book about a rabbit who experiments with colors, too. The title is *White Rabbit’s Colors*, and it is written and illustrated by Alan Baker. Look at the front cover. What do you notice?

INVITE children to share their predictions about what will happen if the rabbit hops in the tub of paint. **PROMPT** them to use the sign and sentence stem, “I predict.”

Do you think the rabbit is going to do something with this tub of yellow paint? What if she hops in it? Think about what you predict will happen. If you would like to share your prediction, sign “I predict” [demonstrate]. You can say, I predict...”

SET THE FOCUS: What happens when Rabbit experiments with colors?

As we read *White Rabbit’s Colors*, notice how Rabbit experiments with colors. Let’s create a chart about what Rabbit finds out about mixing colors.

During

PAUSE after “Now what about red, thought Rabbit.” **ASK** children to make a prediction.

What do you predict will happen to Rabbit? Why? Let’s turn the page to find out.

READ the next page and **PAUSE** after “Red and yellow together make orange.” **ADD** this formula to the chart: “red + yellow = orange.” Scribble or color in a large dot of each color.

Let’s add this color mixture to our chart. Red [color with red] plus yellow [color with yellow] equals what color? Orange! [color with orange] This means that when you mix red and yellow together, they change and become orange.

PAUSE after “How cool blue looks, thought Rabbit.” **ASK** children to make a prediction.

What do you predict will happen to Rabbit? Why? Let’s turn the page to find out.

READ the next page and **PAUSE** after “I’m a very important Royal Purple Rabbit.” **ADD** this formula to the chart: “blue + red = purple.” **INVITE** a child to add each color.

Let’s add this color mixture to our chart. Who wants to use the blue marker to color on our chart? Blue plus... Who can color with the red? What happens when we mix blue and red together? What color do they change into? Yes, we make purple. Who can color with the purple? Now let’s read this color mixture: blue plus red equals purple.

REPEAT with: “yellow + blue = green.”

PAUSE after “‘Now what would happen?’ thought Rabbit.” **INVITE** children to turn and talk about their predictions. **ENCOURAGE** them to use the sentence stem, “I predict.” **INVITE** multilingual learners who speak the same language to share with one another in their home language.

I wonder what will happen when Rabbit mixes green, which is a mixture of yellow, and blue, and red together. How will they change? Think about your prediction. Turn and talk to a partner about it. When it is your turn to talk, say, “I predict...”

After

ASK children what happened when Rabbit mixes red, yellow, and blue. **ADD** this formula to the chart: “red + yellow + blue = brown.” **INVITE** children to add each color using markers.

Rabbit experimented with mixing different colors. What happened when Rabbit mixed red and yellow, and blue? Let’s add this mixture to our chart. Who can add the red? How about yellow? And blue? Now who can add brown to show the mixture of these three colors?

ASK children how Rabbit is a scientist. **STATE** that she predicts and observes mixing colors.

In *White Rabbit’s Colors*, how is Rabbit like a scientist like Scientist Ahmed [show photo]?

Yes, Rabbit experiments with mixing. She mixes colors. She predicts what will happen, and then she observes the mixtures.

Build Interest

CONNECT to mixing colors.

We have been mixing colors just like the monsters in *Monsters Love Colors* and Rabbit in *White Rabbit's Colors* [show books]. Let's mix colors again, using different supplies or materials.

SHOW children the can of shaving cream and spray a bit in a tub. **INVITE** them to observe it and share their thinking. **REFER** to the Anchor Chart: "We Can Describe."

This is shaving cream. Have you ever seen anyone at home using this?

Let's use our senses to observe it (but no tasting)! What do you see? How does it feel? You can use the "We Can Describe" chart [point] to help you.

Build Understanding

ADD more shaving cream to cover the bottom of the tub. **INVITE** children to make predictions about what will happen to the shaving cream if you add some food coloring.

We need some more shaving cream for our mixture today. I'll add more, so it covers the bottom of the tub. Now we are going to add some food coloring [show] to the shaving cream to see what happens. Do you remember when we used food coloring to make our bubble paintings? What do you predict will happen when we add the food coloring to the shaving cream?

EXPLAIN the steps: choose one color, add a few drops of food coloring, predict, mix, and observe. **INVITE** children to collaborate on making the mixture.

Now that we made some predictions, let's make our mixture.

- What color do you want to add first?
- How do you want to mix it?
- What tool will you use?
- Who wants to start mixing? What do you observe?
- Should we add a second color? What is happening to our mixture now?
- Can we separate the food coloring and shaving cream?

Build Experience

GIVE each partnership a bowl or container of shaving cream. **INVITE** them to predict, mix, and observe. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own shaving cream color mixtures.

REFLECT on today's shaving cream color mixing.

Today you mixed food coloring in shaving cream. Let's discuss...

- What happened?
- How would you describe this mixture and the colors you made?
- Do you think you could separate the mixture? Why or why not?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Food Coloring and Shaving Cream" to children's science journals (one per child).

Materials

- Tub or shallow bucket
- Smocks
- Shaving cream (not gel)
- Food coloring (red, blue, and yellow)
- Mixing Tool Collection Box (replenish as necessary with spoons, chopsticks, toothpicks, and craft sticks)
- A bowl or small container (one per partnership)
- Gloves for children (for mixing to avoid stained hands)
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools

Build Background Knowledge

Give children more time to explore shaving cream.



Stretch their Thinking

Invite children to experiment with many different colors. Can they separate them?

Listen/Look For

- How do children describe shaving cream?
- What observations do children make?

Interesting Materials

We suggest a variety of hands-on color activities to engage children, using different textured materials. These sensory experiences will support children's engagement and cognitive growth. Also, to help children along in developing their pencil grip, give them lots of opportunities to get their hands and fingers working together to improve hand strength and dexterity as we suggest in this lesson.

Be Prepared!

Be aware that there may be some stained hands or clothes as a result of this experiment. Use smocks and/or gloves to avoid staining. Also, children can use mixing tools (e.g. spoons, chopsticks) instead of their fingers or hands to reduce stains.



Supporting Multilingual Learners

Continue to provide descriptive language as needed to support new English learners' exploration of textures, sights, and other senses. Continue to develop the "We Can Describe" chart and encourage multilingual learners to add descriptive words from their home language.

Greeting Time

Children hop when they name a color in the song.

Creative Arts: Creative Movement and Dance

SHOW the cover of *White Rabbit's Colors*. **ASK** children how the rabbit gets into the tubs of paint.

We are learning about colors! In our book *White Rabbit's Colors*, how does rabbit get inside the big tubs of paint?

Yes, she hops! That reminds me of our bunny rabbit yoga pose.

REVIEW bunny rabbit yoga pose. **MODEL** and **INVITE** children to use their arms like rabbit ears and hop.

Watch me use my arms like ears and hop like a rabbit. Can you make rabbit ears and hop one time?

PROMPT children to hop each time they sing the name of a color.

Let's be like the rabbit today as we sing "The Color Song." Each time we sing the name of a color, hop one time. Get ready to listen for the color words!

Blue, and yellow
And red too,
Mix them up for something new.
Orange, purple, brown, and green,
Every color that you see,
Blue, and yellow
And red too,
Mix them up for something new.

Make & Prepare

- Review how to do bunny rabbit pose on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.

Additional Materials

- The book *White Rabbit's Colors*
- *Blueprint Yoga*
- *Blueprint Songbook*

Vary the Lesson

Add picture support. Show pictures of objects or actions you name as you give children practice blending the onset and rime together.



Movement Time

Children pretend to paint a rainbow.

Creative Arts: Creative Movement and Dance

CONNECT the colors to rainbows. **SHOW** the rainbow page in *Monsters Love Colors*. **MODEL** how to pretend to paint a rainbow.

We just sang about the colors of the rainbow. Do you like drawing and painting with all those colors? Let's paint a colorful rainbow in the sky.

Watch as I start standing with my feet wide apart. First, I spin this foot forward and bend my knee. Next, I stretch my arms out wide. Then I use my front hand and arm to paint an arch overhead. I'll use the color red first... Can you picture the red arch of my rainbow?

MODEL again, mirroring children's front leg and hand. **GUIDE** children to pretend to paint a red arch. **INVITE** them to suggest a few more colors.

Stand facing this way [point] with your feet out wide. Turn your front foot forward [point] and bend your knee. Keep your other leg straight. Stretch your arms out to the sides. Imagine your front hand is holding the color red. Now sweep the red overhead in an arch. And bring it back.

What color should we paint next?

Make & Prepare

- Familiarize yourself with how to pretend to paint a rainbow on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.
- Have the book *Monsters Love Colors* ready. Mark the page with the rainbow with a sticky note.

Keep It Going

- Go on a rainbow search. Can children find items in nature that match the colors of the rainbow?



Talk Time

Children combine the onset and rime in words.

Literacy: Phonological Awareness

STATE that you will play a word game. **MODEL** isolating the onset and rime of the word "red." **ASK** children to combine them to make the word.

We just painted the colors of the rainbow. Now let's play a game using some color words and other words from our color song.

I'm going to say two parts of one word. Your job is to put the two parts together to make the word. Listen carefully: r-ed. What's the word? Yes, red!

CONTINUE to isolate the onset and rime in other one-syllable words from the color mixing song. **ASK** children to combine them and say the words.

Let's try another one:

- P-ink. What's the word? Pink!
- M-ix. What's the word? Mix!
- S-ee. What's the word? See!

CONTINUE using the names of body parts children used to make a rainbow (l-eg, f-oot, f-eet).

Onset and Rime

Onset and rime are parts of words. The onset is the first part of a one-syllable word. The rime is the rest of the word, beginning with the initial vowel. For example, in the word "red" r- is the onset and -ed is the rime. Some one-syllable words, such as "end" and "ill," do not have onsets. Teaching children to segment and blend onset and rime will help them to decode and spell later on.

Before

CONNECT to learning and exploring the concept of mixing. **REFER** to recent read alouds.

Just like scientists like Scientist Ahmed [show photo], we have learned a lot about making mixtures. There was mixing in the books we read! Here is *The Mixed-Up Truck* [show]. What did the truck mix in this book? Yes! The truck mixed different powders and water.

Here is *How to Wash a Woolly Mammoth* [show]. What happened when water and soap were mixed? Yes! It made bubbles.

REFER to the Unit Project: *I Spy Mixtures*. **RECALL** classroom mixing investigations.

We explored mixing in other ways, too. We have been on the lookout for mixing around us and adding it to our Unit Project: “I Spy Mixtures” [point]. In small groups, we made our own mixtures [show photos].

ASK children what they are learning about mixing.

From reading books about mixing, observing mixing, and trying it yourself, you have made a lot of discoveries. What are you learning about mixing?

GIVE children time to share. Then **TELL** them that they are going to make a class book.

Writers, we are going to create a class book to share what we are learning about mixing. Everyone will get a page to draw what they are learning. Watch me show you how I would make my page in our class book.

During

PLAN ALOUD and then **DRAW** a picture of soap and water. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

I learned you need soap and water to make bubbles. I will draw a bottle of soap. There is a tub of water. Look! Bubbles! How many bubbles should I draw?

Suggested message: “I learned soap and water make bubbles.”

PAUSE to focus on writing structure (speech bubbles tell who is talking).

I am talking about what I learned. But what can I draw around it to show that I am talking? Yes! A speech bubble. I will draw a round shape around the words I said. Then I will make the drawing come to a point near my mouth. This shows I am talking. You might like to use a speech bubble in your writing today, as you talk about what you learned.

INVITE children to reread the message with you.

After

GIVE CHILDREN TIME to brainstorm and plan. **INVITE** children who speak the same home language to share with each other in their home language as a support. **REFER** to images from the read alouds if children need ideas. **SHARE** other resources.

Writers, it is your turn to begin your page of our class book. Remember how I got started. First, I thought about what I know about mixing. What have you learned about mixing?

Then I planned what I was going to draw. What will you draw?

Last, I wrote about my drawing. What will you write?

DISTRIBUTE clipboards with paper and crayons. **INVITE** children to work on their page. **CIRCULATE** and **ASSIST** as necessary. If children need more time, let them know that they can finish their page at the writing center.

RESTATE that our class book will tell us what everyone is learning about mixing.

By making this class book, we are sharing all the interesting things we are learning about mixing. I can't wait to read what you know about mixing!

REREAD the message one more time.

[Transition] **INVITE** children to continue writing on the topic at the writing center.

You can continue to write down all your interesting mixing ideas at the writing center.



Materials

- Clipboards (one per child)
- Blank paper for writing
- Writing tools
- Magnetic letters for reference
- The books *The Mixed-Up Truck* and *How to Wash a Woolly Mammoth*
- Unit Project: “I Spy Mixtures”
- Photos of children during mixture activities
- Photo of Scientist Ahmed
- Resources such as magazines or brochures that feature items children can use in mixtures (and cut out)

Responding to Children

Children are often reluctant to write if it isn't correct. They may ask for the teacher to do it or feel hesitant to write at all. Take small steps to build their confidence! Bring out magnetic letters and find the beginning letter of a word before writing it. Try other fun writing materials, like chunky pencils or coloring pencils. Make sure you notice other times in the day where they attempt writing, such as the dramatic play center or science center.

Class Book Learning About Mixing

Plan on reading the class book to children on Day 19. Children can continue to add pages to this book as the unit progresses, and they explore this topic.



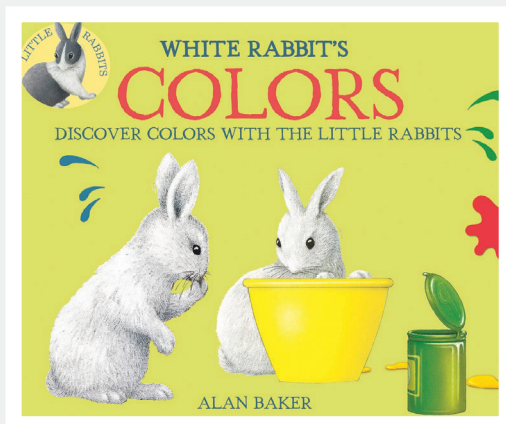
Family Engagement

Download and print “Featured Class Book.” Send home for children to share and brainstorm with their family members. For multilingual learners, talking in their home language about ideas from the English classroom will help solidify and extend their learning. Children can bring this information to the classroom to share with their classmates and use it as they create one or more pages for the class book.



Keep It Going

Join children at the writing center. Introduce paper with a predrawn speech bubble. Encourage children to draw a picture of themselves and use the speech bubble to write what they want to say.



Make & Prepare

- Create a purple collection. Fill a tub with classroom items that are different shades and tones of purple. You can involve children in creating this and other color collections.

Additional Materials

- Bright construction paper or neon paper
- Unit Chart: "Color Mixing"
- Unit Chart: "Words We Are Learning"
- Anchor Chart: "Feelings"

Words We Are Learning

sizzling: very hot like fire

Expressing Feelings through Art

Different colors can remind us of certain feelings. Expressing themselves through art is one way to help children get in touch with their emotions. Ask a child to choose the color(s) that capture their current mood. Then invite them to draw or paint how they feel. If children choose to share about their art work, you can use this opportunity to discuss their feelings.

I Spy Mixtures

Don't forget to point out when children are mixing and add the mixture to the unit chart we made for the Unit Project: "I Spy Mixtures."

Supporting Multilingual Learners

All multilingual learners, whether they are new English language learners or completely fluent in English, will benefit from talking with a partner who speaks the same home language. Thinking and sharing in both of their languages solidifies their learning.

Before

HOLD up a piece of bright construction paper or neon paper. **INVITE** children to share what the color makes them think about or feel. **AFFIRM** their responses.

When you look at this piece of paper, what do you think of? How does it make you feel?

CONNECT to the book.

Did you notice that as Rabbit creates different colors, she thinks about what each color reminds her of too? She describes how the colors make her feel.

As we read *White Rabbit's Colors* today, notice how Rabbit describes each color. We can talk about what different colors make us think or feel.

During

PAUSE after "bright as the sun." **DISCUSS** why yellow reminds Rabbit of the sun. **ASK** children how yellow makes them feel. **REFER** to the "Feelings" chart.

What does the color yellow remind Rabbit of? Why do you think yellow reminds her of the sun? Yes, the sun is a bright yellow light in the sky.

What feeling does yellow remind you of? Why? Look at the "Feelings" chart if you are looking for a word to describe how you feel. Lean and tell a partner!

PAUSE after "sizzling hot red." **DEFINE** "sizzling." **ADD** it to the Unit Chart: "Words We Are Learning." **INVITE** children to share words they know that mean the same thing (in English or their home language).

Rabbit describes the color red as sizzling hot. Can you say that word "sizzling"? Let's find the syllables or beats in that word: sizz-ling. When something is sizzling, it is burning hot like fire. Let's add "sizzling" to the list of words we are learning. Do you know any words that mean the same thing?

EXPLAIN that the paint is not actually hot. **DISCUSS** what the color red makes children think or feel.

Do you think this tub of red paint is really hot, like it could burn Rabbit? Why not? No, the paint is not actually hot. But the color red reminds Rabbit of a sizzling hot fire. What does the color red remind you of? Why?

PAUSE after "icy cold blue. Brrr." **ASK** children if the tub of paint is actually cold. **DISCUSS** what the color blue makes children think or feel.

How does Rabbit describe blue? Yes, she says it is cold like ice. Do you think this tub of paint is really cold? Could it freeze her? Why not? No, the paint is not actually freezing cold. But the color blue reminds Rabbit of freezing cold ice.

What does the color blue remind you of? Why?

After

SHOW the tub of purple items. **INVITE** children to turn and talk about how purple makes them think and feel. **INVITE** multilingual learners who speak the same language to share with one another in their home language.

The way colors look can make us think and feel different ways. Look at this tub of purple items. How would you describe the color purple?

What does purple remind you of? Why? How does purple make you feel? Why?

Turn and talk with a partner...

Build Interest

CONNECT to making color mixtures.

We have been making many mixtures and using different materials [show photos and/or science journals]. We mixed shaving cream and food coloring. Let's mix colors again with a different material.

SHOW children the bucket of sand. **INVITE** them to observe it and share their thinking. **REFER** to the Anchor Chart: "We Can Describe."

What material is this?

Yes, this is sand. Let's use our senses to observe it (but no tasting)! What do you see? How does it feel? What color would you say it is? You can use the "We Can Describe" chart [point] to help you.

Build Understanding

EXPLAIN the steps in making today's mixture: choose one color, add a few drops of food coloring, predict, mix, and observe. **INVITE** children to collaborate on making the mixture.

We are going to add some food coloring [show] to the sand to see what happens. What do you predict will happen when we add the food coloring to the sand?

Now that we made some predictions, let's make our mixture.

- What color do you want to add first?
- How do you want to mix it?
- What tool will you use?
- Who wants to start mixing? What do you observe?
- Should we add a second color? What is happening to our mixture now?

Build Experience

GIVE each partnership a bowl or small container of sand. **INVITE** them to predict, mix, and observe. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own sand mixtures.

REFLECT on today's food coloring and sand mixing investigation.

Today you mixed food coloring and sand. Let's discuss...

- What happened?
- How would you describe this mixture and the colors you made?
- Do you think you could unmix the mixture? Why or why not?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of "Mixing Food Coloring and Sand" to children's science journals (one per child).
- Prepare a large container or tub with enough sand for children to explore and add food coloring to.
- Create bowls or small containers of sand for each partnership

Additional Materials

- Smocks
- Food coloring (red, blue and yellow)
- Mixing Tool Collection Box
- Gloves for children (for mixing to avoid stained hands)
- Anchor Chart: "We Can Describe"
- Science journals
- Writing tools

Build Background Knowledge

Give children more time to explore the sand.

Stretch their Thinking

Invite children to experiment with many different colors.

Listen/Look For

- How do children describe the sand?
- What observations do children make as they add food coloring to the sand?

Working with Food Coloring

Determine how you will add the food coloring to the mixtures. You might decide to add the drops to children's mixtures as a gentle squeeze can drip several drops at a time!

Responding to Children

Adapt the activities based on your children's needs. For example, you may decide to invite children to work together, under your supervision, as they make a group mixture in one bowl or container instead of with partners.

Following Up

At the end of this lesson, we suggest you have children journal about what they learned. Take time to analyze children's journal entries. What are you learning about their cognitive skills? Their writing skills? Their approaches to learning?

Greeting Time

Children hold up a color card when they sing about the color.

Creative Arts: Music

HAND OUT color cards. **PROMPT** children to name their color and tell a partner.

We are experimenting with colors! Today each of you will hold a color card. When you get your card, name the color. Lean and tell a partner.

MODEL and **INVITE** children to hold up their card when they sing the name of that color.

Let's celebrate all of these colors as we sing "The Color Song." When we sing the name of the color on your card, hold it up high. So, when we sing about brown, I'll hold up my brown card like this [demonstrate]. If you also have brown, hold it up now.

Listen for your color as we sing!

Blue, and yellow
And red too,
Mix them up for something new.
Orange, purple, brown, and green,
Every color that you see,
Blue, and yellow
And red too,
Mix them up for something new.

Make & Prepare

- Different color cards or pieces of construction paper: blue, yellow, red, orange, purple, brown, and green

Additional Material

- Blueprint Songbook



Movement Time

Children act out mixing colors.

Creative Arts: Creative Movement and Dance

SHOW the Unit Chart: "Color Mixing." **MODEL** sitting with legs stretched out to the sides, and painting an arch from one foot to the other.

Here is our chart about mixing colors. Let's use it to act out making some color mixtures.

We painted rainbows in an arch overhead. Today we will paint an arch overhead in another way. Watch as I sit with my legs stretched out wide. First, I take my hands over to one foot and dip them in an imaginary tub of paint. Next, I paint an arch over to the other foot.

GUIDE children to mix red and yellow to make orange. **FACE** children to mirror their movements.

Sit with your legs stretched out wide. Make sure there is enough space around your body. Take both hands over to this foot. Dip them in a tub of red paint. Does it look sizzling hot? Paint a red arch over to the other foot. Now dip your hands in bright, sunny yellow. As you paint an arch over to the other side, imagine mixing the yellow with the red. What color did you make?

INVITE children to suggest additional color mixtures.

What colors should we mix next?

Make & Prepare

- Familiarize yourself with how to act out mixing colors on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.

Material

- Unit Chart: "Color Mixing"

Vary the Movement

You could provide children with a painting prop, such as a colorful scarf or ribbon.

Talk Time

Children practice "Calm Color."

Social Emotional: Self-Awareness and Self-Concept

USE Elijah to ask children what color reminds them of feeling calm.

When Rabbit [show book] experimented with colors, we learned that we can describe how different colors make us think or feel. Our friend Elijah wants to know: What color reminds you of feeling calm and peaceful? Why?

CONTINUE using the puppet to talk about using the color to calm down when upset.

"At the art center I dropped a tub of paint and it spilled all over the floor. How do you think I was feeling? Yes, I was upset. But I found my calm color to calm myself down."

GUIDE children to do "Calm Color." Then **ADD** the card to your "Mindful Moment" basket.

Let's practice a Mindful Moment called "Calm Color" [show card]. Sit comfortably and close your eyes. Picture your calm color in your head. Let your thoughts calm down. Next, picture your calm color in your throat, calming down your words. Now picture your calm color in your heart, calming down your feelings. Imagine your calm color filling your whole body.

What did you notice about finding your calm color?

Make & Prepare

- Download and print the "Calm Color" card.



Additional Materials

- The book *White Rabbit's Colors*
- Sayeh and/or Elijah, the social emotional puppets

Executive Function

Teaching relaxation strategies, such as how to calm yourself down or to find a moment of mindfulness, helps children develop cognitive flexibility and self-regulation skills.

Before

REVIEW the letters on the letter ring in a different order. **ASK** children what the letter name is and what sound the letter makes. Then **CONNECT** to the book *White Rabbit's Colors*.

In the book *White Rabbit's Colors* [show], Rabbit changes her color with paint. We have cups of different color paint at the art center. Will you mix colors today? What color can you make? You can choose any color.

FOCUS on words that begin with the /k/ sound.

Color, cups, can. What sound do you hear in the beginning of these words [hold hand up to your ear]? Yes, /k/. Does anyone in our class have a name that begins with the /k/ sound?

DESCRIBE how to form the *letter c* as you write the letters in the corner of your board. **INVITE** children to skywrite the letters. **Optionally, teach the ASL sign.**

One sound the *letter c* can make is the /k/ sound. To write an uppercase *letter C*, I curve around. Now you write it with your finger in the air. This is the lowercase *letter c*. I curve around. Now you try it. While I write today, please look for the *letter c*. We are going to learn how to read it together.

During

DRAW a picture of paint cups. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

Here are some cups of different color paint. What colors should we make them?

Suggested message: "Can you make a new color?"

PAUSE to focus on phonological awareness (/k/ in the word "can").

I hear the /k/ sound in the beginning of the word "can." The *letter c* can make the /k/ sound. Watch me as I write the uppercase *letter C*. I curve around. Now you try it.

REPEAT with the lowercase *letter c* in the word "can." **After, INVITE** children to reread the message with you.

After

INVITE children to find all the *letter c*'s in the message. **CIRCLE** them.

Let's find all the *letter c*'s. Put on your "I spy" goggles like this [demonstrate], and look for the *letter c*! Who wants to point to one in the message?

PLAY "Sign for the Sound." **ASK** children to sign "yes" if a word that you say begins with the /k/ sound or "no" if it does not.

We are becoming experts in the *letter c*. Let's practice listening for words that begin with the /k/ sound and are spelled with the *letter c*. I'll say a word. If the word starts with the sound /k/, sign "yes" [demonstrate]. If the word does not begin with /k/, sign "no" [demonstrate]. Let's try one together: the word is "cat." What should we do? Yes, the word "cat" does begin with /k/ sound, so we should sign "yes."

CONTINUE playing. Then **RESTATE** the name and sound of the *letter c*.

Today we listened to the one sound the *letter c* makes, talked about what it looks like, and found it in our message. We learned that "color" begin with the /k/ sound and begins with the *letter c*.

REREAD the message one more time.

[Transition] **ASK** children to practice the sound /k/ and tell their favorite color.

/k/, /k/, /k/. Say the sound /k/. Do you have a favorite color?



Make & Prepare

- Review the standard pronunciation of this consonant on the *Blueprint* website.
- Review the ASL sign for "yes" and "no" on the *Blueprint* website.
- Familiarize yourself with the ASL sign for the *letter c* on the *Blueprint* website.
- Letter Ring – write the uppercase *letter C* on one side of an index card and the lowercase *letter c* on the other; add this to the Letter Ring after the lesson.

Additional Materials

- The book *White Rabbit's Colors*

Letter Formation

- Uppercase *letter C* – curve around
- Lowercase *letter c* – curve around

The Two Sounds of the *Letter C*

The *letter c* can be hard or soft. In both cases, the *letter c* "borrows" its sound from other letters. When the *letter c* is soft, it borrows the sound made by the *letter s*, /s/, as in "cent." When the *letter c* is hard, it borrows the sound made by the *letter k*, /k/, as in "cat." The *letter c* makes the /s/ sound only when followed by the *letters e, i, and y*.

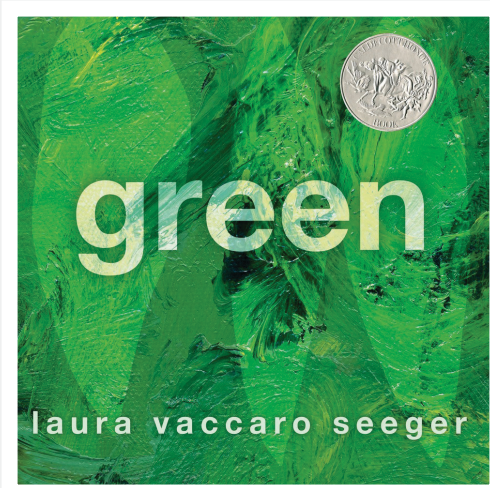
Pronouncing the Sound

When you make the /k/ sound, you open your mouth and lift your tongue in the back. Let out a short burst of air. Be sure not to say "kuh." The sound is voiceless.



Keep It Going

- Join children at the sensory table. Encourage them to look through the tools and materials. Can they find anything that begins with the /k/ sound? Is there a cup for washing off bubbles? A container for shampoo? Can they think of another word that makes the /k/ sound?
- Provide children with magazines and newspapers. Invite them to cut out pictures of objects that begin with the "hard c" sound (car, computer, cake). Did anyone notice that the word cut begins with the "hard sound c"? Create a "hard *letter letter c*" collection by inviting children to paste their pictures on large chart paper.



Make & Prepare

- Collect paint swatches (or other color samples) of different shades of green.

Additional Materials

- Unit Chart: "Color Mixing"
- Unit Chart: "Words We Are Learning"
- Anchor Chart: "Readers Can Say"

Words We Are Learning

wacky: silly, strange, or make-believe

Remember to Save

Green paint swatches for Day 14: Small Group

Supporting Multilingual Learners

Explicitly teach the words "lighter" and "darker" to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (use an online translation tool). This will support their comprehension of the thematic content.

Laura Seeger

The author of this book has a website that you can explore, <http://www.lauraseeger.com>. It includes interviews with the author, links to her other works, and prints.



Before

REFER to the Unit Chart: "Color Mixing." **ASK** children to name things that are green.

We have been experimenting with colors. What happens when we mix yellow and blue together [point to chart]?

Yes, blue and yellow make green. Do you see any green things around the room?

HOLD UP three to five paint swatches of different greens. **COMPARE** them.

Look at these paint swatches. Which one is green? Yes, these are all green! Some are lighter and some are darker, but they are all still green.

SELECT one paint swatch. **ASK** children what it reminds them of, and what they would name that green.

What does green remind you of? Why? If you wanted to name this green, what would you call it?

SHOW the cover. **ASK** children what they notice.

We are going to read a book about different shades of greens. The title is *Green* by Laura Vaccaro Seeger. Look at the front cover. What do you notice?

It looks like a mix of different greens. Let's read to find out more about the color green.

During

PAUSE on each page to **DISCUSS** the name of each green. See the following examples:

"Forest green." What's green in this picture? Yes, the leaves on the trees in the forest, or woods, are green. So we can call this kind of green forest green.

"Sea green." Why do you think the author calls this sea green? Maybe it reminds her of the color of the sea, or ocean water. This sea turtle sort of matches the green of the water.

PAUSE before "lime green." **ASK** children what they see. **INVITE** them to name the green. **REPEAT** for "pea green" and "jungle green."

What do you see in this picture? Yes, these are limes. Limes are a sour fruit similar to lemons. What do think the name of this green could be? Yes, lime green!

Now think about what you see in this picture. What could this green be called?

PAUSE after "khaki green." **INVITE** children to lean and tell a partner another name for it.

Khaki is a clothing material that is this color. But can you think of another name for this color green? Lean and tell a partner.

PAUSE after "wacky green." **DEFINE** "wacky." **ADD** it to the Unit Chart: "Words We Are Learning." **INVITE** children to share words that mean the same thing (in English or their home language).

What does that word "wacky" mean? When something is wacky, it is silly or strange. Let's add "wacky" to the list of words we are learning. Do you know any words that mean the same thing?

What looks wacky in this picture? Yes, zebras have black and white stripes, but this zebra has green stripes!

After

INVITE children to turn and talk about their favorite greens. **ENCOURAGE** them to use the sentence stem, "I like..." **INVITE** multilingual learners who speak the same language to share with one another in their home language.

There are many different kinds of green in this book. Think about which green you like. Turn and talk with a partner about it. When it is your turn to talk, you can say, "I like..."

Build Interest

SHOW two swatches of green, one light and one dark. **INVITE** children to talk about what they notice.

Remember when we read the book *Green* [show], we looked at paint swatches. Let's look closely at some of them again. This is one shade of green [point]. This is another shade of green [point].

What are you noticing?

Yes, we see that this green swatch [point] is darker than this green swatch [point].

Build Understanding

SHOW the materials. **EXPLAIN** the steps in making today's mixture: take some black paint and add it to the green, predict, mix, and observe. **INVITE** children to collaborate on making the mixture. **REFER** to the Anchor Chart: "We Can Describe."

Here are two plates. They both have a dollop of green paint on them. I wonder...what can we add to the paint to make the green darker?

Yes, we can take some black paint and mix it into the green paint on this plate [point]. What do you predict will happen when we mix them together?

Let's not mix anything into the green paint on this plate [point] so we can compare them.

Now that we made some predictions, let's make our mixture.

- Who wants to dip their paintbrush in the black paint first?
- Start mixing. What do you observe?
- Should we add more black paint? What is happening to our mixture now?
- How do the two plates of green paint compare? Is one lighter? Darker?

Build Experience

GIVE each partnership two plates of green paint, one paintbrush, and one cup of black paint. **INVITE** them to predict, mix, and observe. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own green mixtures.

REFLECT on today's mixing experience with black and green paint.

Today we mixed black and green paint. Let's discuss...

- What happened when you mixed a little black paint to the green?
- What happened when you mixed a lot of black paint?
- How did the amount of black paint change the shade of green?
- What surprised you about mixing paint today?

INVITE children to use the shades of green they created to paint with at the art center.

You can take your shades of green to the art center to paint. I wonder what you will create.

Make & Prepare

- Add a dollop of green (or other color) paint onto two different paper plates or aluminum foil squares.
- Cover the table with newspaper or a reusable tablecloth for easy clean up.

Additional Materials

- Smocks (one per child)
- Green paint (or any other color)
- Black paint
- Squeeze bottles (these make it easy to dispense paint)
- Paint brushes or craft sticks (one for each child)
- Green paint swatches (one light and one dark)
- Anchor Chart: "We Can Describe"



Color Theory Terms

When painting, the word "color" is used to describe what we see. On the color wheel, the brightest six to 12 unmixed pigments are referred to as hues. A shade is a hue with black added. The color is the same, just darker. When you add white, you tint a hue. Again, the color is the same, only lighter. In this lesson, we don't add gray, but if you did, you would be creating a tone.

Build Background Knowledge

Sort different shades of color using crayons. Collect several kinds of green crayons. Sort, group, or organize the crayons by their color.

Stretch Their Thinking

Mix black paint with another color to explore more with creating shades of color.

Listen/ Look For

- How do children describe their mixtures?
- What do children share as they reflect on the mixing experience?

Supporting Language Development

Remember that homonyms, words that sound and are spelled the same but have different meanings, can be tricky for children. Shade is one of these words. Take the time to explicitly state what shade means in the context of this lesson to support vocabulary development.

Document Their Learning

Take photos of children working. These will be useful for helping them recall all that they've done and to make comparisons between mixing experiments.

Greeting Time

Children twirl when they sing about the color on their card.

Creative Arts: Creative Movement and Dance

DISTRIBUTE cards. **ASSESS** that all children know their color.

We are experimenting with colors! Today each of you has a color card. Lean in and tell your neighbor what color is on your card.

INVITE children to tell a neighbor what it reminds them of.

Think about what your color reminds you of. Lean in and tell your neighbor.

MODEL and **PROMPT** children to twirl when they sing about the color on their card.

Let's celebrate the colors on our cards as we sing "The Color Song." When we sing the name of the color on your card, hold it up high and twirl. So, when we sing about pink, I'll hold it up and twirl. If you also have pink, hold it up and twirl. Listen for your color as we sing!

Blue, and yellow

And red too,

Mix them up for something new.

Orange, purple, brown, and green,

Every color that you see,

Blue, and yellow

And red too,

Mix them up for something new.

Make & Prepare

- Reuse different color cards or pieces of construction paper: blue, yellow, red, orange, purple, brown, and green.
- Review the ASL signs for "yes" and "no" on the *Blueprint* website.

Additional Material

- Blueprint Songbook



Movement Time

Children act out mixing colors with a partner.

Creative Arts: Creative Movement and Dance

SHOW the Unit Chart: "Color Mixing." **REVIEW** Day 14: Movement. **MODEL** how to paint with a partner. **Sit facing each other with legs stretched out, and move your hands in an arch from one foot to the other.**

Here are some color mixtures on our chart. Today let's experiment with mixing colors with a partner!

Watch as [name] and I sit facing each other with our legs stretched out wide. We each pick a color. I pick blue.

So we both lean to the same side and dip our hands in blue. Now together we paint an arch over to the other side. What color should we mix with blue? Okay, yellow! Let's dip and paint and arch back over to the other side. What color did we make?

GUIDE children to act out mixing colors with a partner.

Now it's your turn to mix colors with a partner! Sit facing your partner with your legs stretched out wide. Each of you pick a color. Then paint together and see what colors you mix up!

Make & Prepare

- Familiarize yourself with how to act out mixing colors with a partner on the *Blueprint* website. Be ready to model it, or prepare another adult and child, or two children to do so.

Additional Material

- Unit Chart: "Color Mixing"

Vary the Movement

You could provide children with a painting prop, such as a colorful scarf or ribbon.

Talk Time

Children compare different shades of yellow.

Creative Arts: Visual Arts

SHOW the book *Green*. **REVIEW** that there are different versions of one color.

Experimenting with colors is fun! We read this book about one color: *Green*. This book helped us learn that there are different shades of green. Some are darker, and some are lighter.

DISPLAY several color swatches of different shades of yellow. **COMPARE** the shades. **INVITE** children to put them in order from lightest to darkest. Offer support as needed.

Here we have all these different paint swatches of yellow. What do you notice?

- Can you help me put these yellows in order from lightest to darkest?
- Which is the lightest yellow you see? Who can come up and point it out?
- Which one should go next? Why?

We are learning that colors can be mixed and they come in all different shades.

Make & Prepare

- Collect paint chips or swatches to show different shades of yellow.

Additional Material

- The book *Green*

Robust STEM Activities

Children often arrange objects in groups according to different attributes. In addition to grouping, children also organize objects in increasing or decreasing order. This is called seriation. In this lesson, children use shades of color to organize the paint chips. Look for or model opportunities to place items in an increasing or decreasing order using other attributes such as length, width, or weight.



Before

REVIEW the letters on the letter ring in a different order. **ASK** children what the letter name is and what sound the letter makes. Then **CONNECT** to the book *Green*. **SHOW** celery and a box of cereal.

We read the book *Green*. Sign “yes” [demonstrate] if you’ve been noticing things around you that are green. I certainly have! Last night, I was chopping up some vegetables when I realized my celery was green [show]! This morning, as I ate my cereal [show], I looked down and noticed I was eating out of a green bowl.

FOCUS on words that begin with the /s/ sound spelled with the *letter c*.

Certainly, celery, cereal. What is the first sound in these words [hold hand up to your ear]? Yes, /s/. I keep hearing the /s/ sound. Does anyone in our class have a name that begins with the /s/ sound?

COMPARE the soft and hard sounds made by the *letter c*.

We learned that the *letter c* makes the /k/ sound. But did you know that the *letter c* is special because it can make another sound, too? It can also make a soft sound /s/, as in “cereal,” /s/, “celery,” /s/. The *letter c* can make two sounds, /k/ and /s/!

REVIEW how to form the *letter c* as you write the letters in the corner of your board. **INVITE** children to skywrite the letters. **Optionally, teach the ASL sign.**

The *letter c* makes the /s/ sound. To write an uppercase *letter C*, I start at the top and curve around. Now you write it with your finger in the air. This is the lowercase *letter c*. I curve around. Now you try it. While I write today, please look for the *letter c*. We are going to learn how to read it together.

During

DRAW a picture of celery. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

I want to draw a picture of my celery. What shape should I draw?

Suggested message: “Celery is certainly green.”

PAUSE to focus on phonological awareness (/s/ in the word “celery”).

I hear the /s/ sound in the beginning of the word “celery.” It is the soft sound for the *letter c*. Watch me as I write the uppercase *letter C*. I start at the top and curve around. Now you try it.

REPEAT with the lowercase *letter c* in the word “certainly.” **After, INVITE** children to reread the message with you.

After

INVITE children to find all the *letter c*’s in the message. **CIRCLE** them.

Let’s find all the *letter c*’s. Put on your “I spy” goggles like this [demonstrate], and look for the *letter c*! Who wants to point to one in the message?

PLAY “Sign for the Sound.” ASK children to sign “yes” if a word that you say begins with the /s/ sound or “no” if it does not.

We are becoming experts in the *letter c*. Let’s practice listening for words that begin with the /s/ sound. I’ll say a word. If the word starts with the sound /s/, sign “yes” [demonstrate]. If the word does not begin with /s/, sign “no” [demonstrate]. Let’s try one together: the word is “celebrate.” What should we do? Yes, the word “celebrate” does begin with /s/, so we should all sign “yes.”

CONTINUE playing. Then **RESTATE** the name and other sound of the *letter c*.

Today we listened to the other sound the *letter c* makes, the soft sound /s/. We learned that “celery” begins with the /s/ sound.

REREAD the message one more time.

[Transition] **ASK** children to pretend to eat celery and say the sound /s/.

Pretend you are eating celery. Mmmm, crunchy celery. /s/!



Make & Prepare

- Review the standard pronunciation of this consonant on the *Blueprint* website.
- Review the ASL signs for the *letter c*, “yes,” and “no” on the *Blueprint* website.
- Bring in celery and a box of cereal.

Additional Material

- The book *Green*

Letter Formation

- Uppercase *letter C* — curve around
- Lowercase *letter c* — curve around

Pronouncing the Sound

When you make the soft *c* sound, /s/, you close your teeth together. Now smile with your teeth closed and keep your tongue behind your teeth. This sound is voiceless.

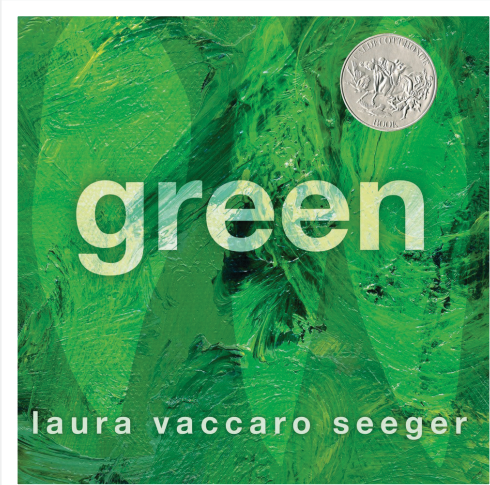
Interacting with the Message

Children were asked to find the *letter c* in the message. Are there any other letters children can find in the message? Invite them up to point out a letter that they know. Then draw a circle around it. Remember to draw the circle yourself (children’s writing won’t be as precise as yours) to visually reinforce that circles indicate letters. What do children know about the letter they found? Do they know the sound it makes? Do they know any words that begin with it?



Keep It Going

- Gather children in a small group. Show different images of words that begin with the *letter c*. These should be a mix of words beginning with soft *c* (images of a city, circle, and cereal) and hard *c* (images of a cat, car, cup, coffee). Ask them to listen closely to the initial sound as you say it. Have children repeat the word. Do they hear the /k/ sound? If so, ask them to make the /k/ sound and put that hard *c* word to one side. Do they hear the /s/ sound? If so, ask them to make the /s/ sound and put that card on the other side, creating groups of hard *c* and soft *c* words.



Material

Anchor Chart: “Readers Can Say”

Book Details

Your children were probably excited by the cut-out on each page. You can use this feature to talk about shapes and connect the pages together.

Multilingual Learner

We use this term as an umbrella for any child who speaks, reads, writes, and thinks (or is learning to speak, read, write, and think) in more than one language. We use this term rather than “bilingual” because we recognize that many children live their lives in more than two languages (e.g. a child of Guatemalan descent who reads bedtime stories in Spanish with their parents, speaks Ki’che’ with their grandparents, and is learning in English at school). We use the term “new English learners” to refer to multilingual children who are new to learning English. They might speak, read, write and/or think in more than one language at home. But in school, they are beginning to learn English.

Keep It Going

- Go on a “green” walk and collect all the green items in nature children can find. Sort them and/or compare them to the colors in the book *Green*.



Before

INVITE children to describe the different greens on the cover and then in the book.

Let’s take a closer look at the front cover of *Green* by Laura Vaccaro Seeger.

Is the green paint all the same exact green? What colors do you see?

We see darker green and lighter shades of green. It looks like this part has more yellow mixed in.

As we reread *Green* today, let’s look more closely at the colors in the paintings. We can observe and describe the different shades of green she uses and all the other colors that we see.

During

PAUSE to invite children to describe the different kinds of green. **POINT OUT** specific areas of paint in the pictures (show sea, lime, and pea). **ASK** guiding questions to help children compare different shades and tones as in the following examples:

“Sea green.” Look closely at Laura’s painting on this page. How would you describe sea green [point]?

- Does it look like she mixed in more blue or more yellow? How can you tell?
- Is sea green a dark or light green?
- What other color do you think she mixed in to paint the turtle? Why?

“Lime green.” How can you describe what lime green looks like [point]?

- Is it bright or dull? What do you think makes it look so bright?
- How does the extra yellow make you feel? Why?

“Pea green.” How is pea green different from sea green? Let’s look again at both greens to help us compare them. What do you notice?

Yes, pea green also has more yellow, but it is not as bright as lime green. It looks like it has some brown or gray mixed into the paint, too.

CONTINUE reading and discussing the different kinds of green.

After

SHOW the page that says: “all green.” **INVITE** children to turn and talk about the different kinds of green they see in the picture. **ENCOURAGE** them to use the sentence stem, “I see...” **INVITE** multilingual learners who speak the same language to share with one another in their home language.

Wow, Laura painted all sorts of greens. Let’s look back at this page: “All green.” Take a moment to closely observe all the different greens in this picture. In a moment, we will turn and talk about what we see. When it is your turn to talk, you can start by saying, “I see...”

CONNECT to children’s experimenting with colors.

When you are experimenting with colors, you can create different colors and different shades. Scientists do that and so do artists like Laura.

Build Interest

REFER to photographs to help children recall Day 14: Small Group’s investigation of mixing black and green paint. **INVITE** them to think about how to make a color lighter.

We worked on making our green paint darker. Do you recall how we did it [refer to photos]?

Yes, we added black paint. The more black paint we added, the darker the green became.

Build Understanding

ASK children how they think they could make green lighter in color.

Here is some green paint. How do you think we might change this green and make it lighter? What color do you think we could add?

SHOW the materials. **EXPLAIN** the steps in making today’s mixture: take some white paint and add it to the green, predict, mix, and observe. **INVITE** children to collaborate on making the mixture. **REFER** to the Anchor Chart: “We Can Describe.”

Here are two plates. They both have a dollop of green paint on them. We are going to take some white paint and mix it into the green paint on this plate [point]. What do you predict will happen when we mix them together?

Let’s not mix anything into the other green paint [point], so we can compare them. Now that we made some predictions, let’s make our mixture.

- Who wants to dip their paintbrush in the white paint first?
- Start mixing. What do you observe?
- Should we add more white paint? What is happening to our mixture now?
- How do the two plates of green paint compare? Is one lighter? Darker?

Build Experience

GIVE each partnership two plates of green paint, one paintbrush, and one cup of white paint. **INVITE** them to predict, mix, and paint. **INVITE** multilingual learners who speak the same language to work together in their home language.

Now you can work with your partner and make your own green mixtures.

REFLECT on today’s mixing experience with white and green paint.

Today we mixed white and green paint. Let’s discuss...

- What happened when you mixed a little white paint to the green?
- What happened when you mixed a lot of white paint?
- How did the amount of white paint change the shade of green?
- What surprised you about mixing paint today?

INVITE children to use the shades they created to paint with at the art center.

You can take your shades of green to the art center to paint. I wonder what you will create.

Make & Prepare

- Add a dollop of green (or other color) paint onto two different paper plates or aluminum foil squares.
- Cover the table with newspaper or a reusable tablecloth for easy clean up.
- Print photographs from Day 14: Small Group.

Materials

- Green paint (or any other color)
- White paint
- Squeeze bottles (these make it easy to dispense paint)
- Paint brushes or craft sticks (one for each child)
- Smocks (one per child)
- Anchor Chart: “We Can Describe”

Build Background Knowledge

Using different shades of the same color crayon, reinforce the concept of lighter and darker by asking children to point out the lighter and/or the darker ones.

Stretch Their Thinking

Mix white paint with another color to explore more with creating tints of color.

Listen/ Look For

- What are children discovering about mixing colors? What ideas do they share?
- How do children describe their color mixtures?

Supporting Individual Children

Activities with lots of steps or materials can be overwhelming for some children. If that is the case for some of your children, make the activity simpler by reducing the number of items you have out and by focusing on one step at a time.

UNIT 6 WEEK

4

Be Sure To...

- Make mixtures with children that they can drink.
- Explore volume by having children fill jars with different materials.
- Teach the *letter o*.

Materials

- Sugar, lemons, lemonade powder, water, sugar packets
- Juicer (optional)
- Knife and cutting board
- Sand and pebbles

Books

- *Is That Wise, Pig?*
- *The Mixed-Up Truck*
- *Bubbles*
- *How to Wash a Woolly Mammoth*
- *Monsters Love Colors*
- *White Rabbit's Colors*
- *Green*
- *When Grandma Gives You a Lemon Tree*
- *The Lemonade Hurricane*
- *Blueprint Songbook*
- Unit 6 Class Book

Charts

- Anchor Chart:
 - “We Can Describe”
 - “Feelings”
 - “Power of 3”
 - “Cheers”
 - “Readers Can Say”
- Unit Chart:
 - “Words We Are Learning”
 - “Tally Marks”
 - “Color Mixing”
 - “I Spy Mixtures”

How can we mix and make lemonade?

Lemonade can be made using many different ingredients. The taste will change depending on what you use.

The mixing unit concludes with a nice cold drink of lemonade! Children read books about lemonade and compare methods for making different types of lemonade. They also explore volume, as they count how many scoops it takes to fill a jar with different sized materials. Lemonade is also used as a jumping off point for discussing mindfulness, with children practicing new mindfulness strategies. As the unit draws to a close, children will celebrate what they have learned and listen to their class book read aloud.

Keep in Mind

- Remember to have the class book completed, laminated, and bound by Day 19.
- When you wrap up this unit, be sure to revisit the artifacts you created with children (e.g. charts, books). Discuss what children learned, what their favorite things were, and what new ideas they want to keep. Share with others in your community (e.g. other classrooms, families).



Words We Are Learning

dazzling
bright and shiny

pinch
a small amount of something

hurricane
a big storm with wind and rain



Multilingual Learner Anchor Words

- lemon



From the Songbook

“Lemonade”

This poem is used during Greeting Time. Copy the lyrics, and send home to families.



Working with Families

Share this information with families:

Invite families to participate, as you celebrate this unit’s learning. During Gathering Time on Day 19 and 20, if families are present, have them join in the greeting and movement! Then they can listen as you share the class book (Day 19) and celebrate the learning across the unit (Day 20). See the Blueprint website for examples of invitations.

Encourage families to have children help with mixing, pouring, and measuring to build their finger, wrist, and hand strength and coordination.



Trips & Visitors

Alex’s Lemonade Stand <https://www.alexslimonade.org/> is a nonprofit organization raising money to support childhood cancer. Search their website to learn how to launch a lemonade stand and raise money at your school.



Remember | <https://cliblueprint.org/resources-tx>

You can find downloads, videos and more on the Blueprint website.

	Day 16	Day 17	Day 18	Day 19	Day 20
Greeting Time	Children learn a poem about making lemonade. <i>Literacy: Literate Attitudes and Behaviors</i>	Children chant the poem using an excited expression. <i>Literacy: Literate Attitudes and Behaviors</i>	Children chant about another drink mixture. <i>Literacy: Literate Attitudes and Behaviors</i>	Children make up a wacky mixture. <i>Literacy: Literate Attitudes and Behaviors</i>	Children make up a poem about mixture with a partner. <i>Literacy: Literate Attitudes and Behaviors</i>
Movement Time	Children follow “if/then” directions. <i>Science: Engineering and Technology</i>	Children combine two “if/then” codes in an AB pattern. <i>Science: Engineering and Technology</i>	Children follow “if/then” codes in an AABB pattern. <i>Science: Engineering and Technology</i>	Children follow “if/then” codes in an ABB pattern. <i>Science: Engineering and Technology</i>	Children follow “if/then” codes that are not in a pattern. <i>Science: Engineering and Technology</i>
Talk Time	Children vote for which lemonade mixture to make first. <i>Math: Measurement and Data</i>	Children role-play to help a puppet calm down. <i>Social Emotional: Self-Awareness and Self-Concept</i>	Children predict what will happen to a drink mixture that sits still. <i>Science: Scientific Inquiry and Practices</i>	Children listen to the class book about mixing. <i>Literacy: Listening and Speaking</i>	Children discuss what they have learned about mixing and making. <i>Literacy: Listening and Speaking</i>
Message Time Plus	Children identify how many syllables are in a word. <i>Literacy: Phonological Awareness</i>	Children learn about the <i>letter o</i> . <i>Literacy: Phonological Awareness</i>	Children learn the word “dazzling.” <i>Literacy: Vocabulary</i>	Children learn the word “pinch.” <i>Literacy: Vocabulary</i>	Children distinguish between words that begin with /m/ and /k/. <i>Literacy: Phonological Awareness</i>
Intentional Read Aloud	Children make predictions. <i>Literacy: Comprehension</i>	Children discuss how the character’s feelings change. <i>Literacy: Comprehension</i>	Children discuss how the character’s behavior changes. <i>Social Emotional: Self-Regulation and Responsible Behavior</i>	Children practice the mindfulness exercise “Sit, Bow, Breathe.” <i>Social Emotional: Self-Awareness and Self-Concept</i>	Children vote for their favorite book from the unit. <i>Literacy: Literate Attitudes and Behaviors</i>
Small Group	Children make the first lemonade mixture. <i>Science: Physical Sciences</i>	Children make the second lemonade mixture. <i>Science: Physical Sciences</i>	Children measure volume using sand. <i>Math: Measurement and Data</i>	Children measure volume using pebbles. <i>Math: Measurement and Data</i>	Children measure volume using water. <i>Math: Measurement and Data</i>
Reflection Time	What do you like to drink? How do you like lemonade?	Would you want to set up a lemonade stand?	What is the best way you know to make yourself feel calm?	How can we mix and make lemonade?	What happens when we mix things together?

Centers to Launch

See Pages 14-25

Writing Center | Color Word Sequencing

Technology Center | Recipe Book



Greeting Time

Children learn a poem about making lemonade.

Literacy: Literate Attitudes and Behaviors

ASK children to name mixtures they eat or drink. **ACTIVATE** their experience with lemonade.

We have been experimenting with mixtures. Look at our Unit Chart: “I Spy Mixtures.” Are there any mixtures that we can eat or drink?

A mixture we can drink is lemonade. Do you like lemonade? Have you ever made it? What did you mix together to make it?

One way to make lemonade is to mix the juice from a lemon [hold up], sugar [hold up], and water. Mixing these ingredients together [mimic stirring] will give us lemonade [mimic drinking].

MODEL chanting and acting out the “Lemonade Poem.” **INVITE** children to chant and act it out.

Listen and watch as I chant and act out a poem about making lemonade.

Lemon juice is sour [squeeze a fist].

But sugar is so sweet [sprinkle with the other hand].

Mix them up with water [hold one hand like a cup and stir with the other].

Then sip your tasty treat [pinch a straw and then make a slurping sound].

Can you chant and act out making a lemonade mixture with me?

Make & Prepare

- A lemon
- A sugar packet

Additional Materials

- *Blueprint Songbook*
- Unit Project: “I Spy Mixtures”

Supporting Multilingual Learners

Explicitly review the word “lemon” to children who are new English learners. Use gestures, pictures, and/or directly translate it into the children’s home language (use an online translation tool). This will support their comprehension of the thematic content.

Movement Time

Children follow “if/then” directions.

Science: Engineering and Technology

ASK children what tools they imagined using to stir and sip. **SHOW** a spoon and straw.

What tool did you imagine using to stir the mixture of lemon juice, sugar, and water? Was it a spoon [hold up]?

And what tool did you imagine using to sip your lemonade mixture? Was it a drinking straw [hold up]?

REVIEW how to play the “If/Then” game. **MODEL** and **INVITE** children to practice two codes: if you see a spoon, then stir your hips around. If you see a straw, then reach your arms up and stretch.

Let’s play a game with this spoon and straw! Do you remember how to play “If/Then”?

Yes, when we play “If/Then,” we follow a special code. So, if we see something, then we know what to do. Please look and listen to learn our special codes.

If you see a spoon, then stir your body like a spoon. Put your hands by your sides and move your hips around, but don’t move your feet [demonstrate]. You try!

If you see a straw, then pretend your body is a straw. Reach your arms up and stretch long [demonstrate]. You try!

Let’s practice these “if/then” codes again. I’ll hold up one of these objects. If you see a... then you will...

Materials

- A spoon
- A drinking straw

Remember...

While the components of Gathering Time can be taught one right after the other, each part can also stand alone. You may use one as a transition activity, or repeat the song or movement at another time of day. Reflection Time, though, is intended for the end of the day to give children closure on their daily experiences.

Talk Time

Children vote for which lemonade mixture to make first.

Math: Measurement and Data

SHOW the graph “What lemonade mixture should we make first?” that all children have filled out.

Did that game make you thirsty? How would you like to make a lemonade mixture?

Each of you answered this question: what lemonade mixture should we make first? You added a tally mark next to the mixture that you would like to make first: lemon juice, sugar, and water, or a lemonade powder and water.

GUIDE children to count and compare the sets of tally marks. Below are some suggested questions:

Let’s count the tally marks to find out what lemonade mixture we would like to make first.

How many tally marks are in each row? How can we find out?

Do more people want to make the mixture of lemon juice, sugar, and water, or the mixture of lemonade powder and water? How do you know?

We will make and taste both lemonade mixtures. First we will make...Next we will make...

Make & Prepare

- Create a graph entitled: What lemonade mixture should we make first? Show ingredients and/or pictures of two mixtures: lemon (juice), sugar, and water, and a lemonade powder and water. Have children use tally marks to vote.
- Make sure that children have filled out the graph before Talk Time. For example, they can take turns filling it out when they arrive at school.

Responding to Children

Are children able to participate in the organization and displaying of information using graphs and charts? If so, encourage them to collect data from their classmates and create more complex graphs (more than two categories). If not, revisit basic counting skills. Focus on simple graphs with two categories and small numbers.

Before

CONNECT to voting on which way to make lemonade in Talk Time. **INVITE** children to say the word “lemonade” and count out the beats or syllables. **ASK** children to show the number of beats or syllables in the word by holding up the same number of fingers.

I can’t wait to make lemonade! During Talk Time, we voted on which way we want to make lemonade first. Let’s all say the word “lemonade.” Let’s stand up and tap out the beats or syllables in that word. “Le-mon-ade.” What did you tap? Yes, your head, shoulders, and knees. How many beats or syllables is that? Show it with your fingers. Yes, you can hold up three fingers to show the three syllables in the word “lemonade.”

INVITE a child to make the corresponding number using tally marks.

Who can come up and show us three by drawing tally marks on the board?

Watch as I use the word “lemonade” in the message today.

During

DRAW a picture of a glass of lemonade. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

Here is a glass of lemonade, just like we will make. Should I add some ice cubes? How many?

Suggested message: “We will make lemonade.”

PAUSE to focus on phonological awareness (beats or syllables in the word lemonade).

How many beats or syllables are in the word “lemonade”? What did we do to find out? Yes, we slowly said the word and tapped our head, shoulders, and knees. Let’s count it again.

INVITE children to reread the sentence with you.

After

REVIEW how to tap out beats or syllables.

We just stood up and tapped out the syllables in the word “lemonade.” How many syllables are in the word? Yes, three! We tapped our head -one, our shoulders -two, and our knees -three, as we slowly said the word.

TELL children they are going to continue counting the number of syllables in words. **INVITE** them to stand and count the syllables by tapping them out on their body. **SELECT** words from the Unit Chart: “Words We Are Learning.”

Let’s keep tapping out the number of beats or syllables in different words. First, I’ll point to a word on our “Words We Are Learning” chart and say it. You repeat it. Then we can tap out the number of beats or syllables on our body. Ready? Let’s all stand up.

ASK children to show how many syllables are in the word with their fingers.

Who can show us how many beats or syllables were in that word using their fingers?

INVITE a child to make the corresponding tally marks on the board.

Who can show us how many beats of syllables were in that word by drawing tally marks on the board?

RESTATE that syllables are the number of beats in a word.

We’ve been practicing counting the syllables in words. Remember, the syllables are the beats you hear. You can count them by tapping different parts of your body as you say the word slowly.

REREAD the message one more time.

[Transition] **INVITE** children to hold up the number of fingers that represent the syllables in their name.

How many syllables are in your name? Hold up that many fingers.



Materials

- Graph from Day 16: Talk Time
- Unit Chart: “Words We Are Learning”

Blending Syllables

In addition to segmenting or counting out syllables, invite children to practice blending syllables. For example, say “wack-y” (touch your head and shoulders) and then have children say the whole word “wacky” while brushing their hands down from their heads towards their waist. Attaching this physical movement to the verbal act of blending will support instruction.

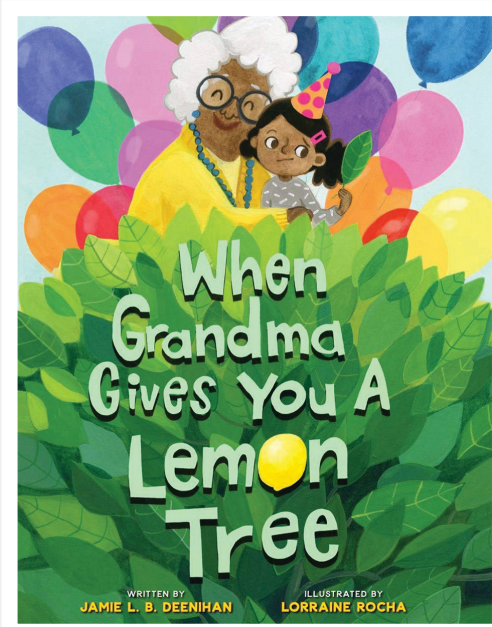
Following Up

This lesson reviewed the beats or syllables in words. Which children are able to segment words into syllables? Which children need more practice?



Keep It Going

- While waiting in line, invite children to continue the syllable game from the MTP lesson. Encourage them to listen closely to each word you say, tap (head, shoulders, knees), and use their fingers to show how many syllables are in the word.
- Gather children in a small group. Provide each child with cubes that can connect to one another. Encourage children to listen closely to the words you say. Invite them to say the word and then have them use the cubes to show how many syllables are in the word. For example, have them say “color” and then connect two cubes together to show the word “color” has two syllables.



Make & Prepare

- Bring in a lemon.
- Review the ASL sign for “I predict” on the *Blueprint* website.

Materials

- Anchor Chart: “Readers Can Say”
- Unit Chart: “Words We Are Learning”

Words We Are Learning

dazzling: bright and shiny

Keep It Going

- Explore the idea of creating a lemonade stand. Are children interested? How would they do it? What would they need?



Before

CONNECT to lemonade mixtures. **TALK** about where lemons come from. **ASK** children what they would do with a lemon tree.

We are exploring how to mix and make lemonade. There are different ways we can make lemonade. One ingredient we might use is a lemon [show]. Do you know where lemons come from?

Yes, you can buy lemons and other fruits at the market. But lemons actually grow on trees! Would you like to have a lemon tree? Why or why not?

What would you do if someone gave you a lemon tree? Why?

SHOW the cover. **INVITE** children to predict what the girl will do with the lemon tree. **PROMPT** them to use the sign and sentence stem, “I predict.”

Today we are going to read a book about a girl who gets a lemon tree from her grandmother. The title is *When Grandma Gives You a Lemon Tree*. It is written by Jamie L. B. Deenihan and illustrated by Lorraine Rocha. Have a look at the cover.

What do you think the girl will do with the lemon tree? If you would like to share your prediction, sign “I predict” [demonstrate]. You can say, “I predict...”

Let’s read to find out what she does with her new lemon tree.

During

PAUSE after “But do you know what’s even more fun?” **INVITE** children to make a prediction. **REMAND** them to use the sign and sentence stem, “I predict.”

I wonder what the girl is going to do next with the lemon tree? What do you think? If you would like to share your prediction, sign “I predict.” Say, “I predict...”

PAUSE after “Now you have lemon juice.” **REREAD** the page. **MODEL** and **INVITE** children to act out making lemon juice.

What are the girl and her grandma doing? Let’s pretend we are making lemon juice, too!

Pick them [grab with your hand]. Slice them [chop with the edge of your hand]. Squeeze them [slowly make a fist]. Come on—squeeze, squeeze, squeeze-a-roo [make a fist]! Ta-da!

PAUSE after “Cue a dazzling smile and...” **DEFINE** “dazzling.” **ADD** it to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words that mean the same thing (in English or their home language). **SUMMARIZE** that the girl is selling the lemonade she made.

The girl has a dazzling smile. Can you say “dazzling”? Let’s find the beats or syllables in that word: daz-zing. What does dazzling mean? When something is dazzling, it is bright and shiny. It makes you want to look at it. Let’s add “dazzling” to the list of words we are learning. Do you know any words that mean the same thing? Can you show me your dazzling smile?

What did the girl do with the lemon juice? Yes, she mixed it with water and sugar to make lemonade. Now she is selling it to the neighbors in her community.

PAUSE after: “Now you can finally buy exactly what you want.” **INVITE** children to predict what the girl will buy.

She earned money by selling lemonade. Now she is at the store. What do you think she will buy? Do you think it is something from her original list? Why or why not?

After

DISCUSS what the girl will do with the lemon tree now.

Look at all the plants the girl got for her community! Can you spot the lemon tree? How do you know it is a lemon tree?

What do you think the girl will do with the lemon tree now? Why?

Build Interest

CONNECT to voting for which way to make lemonade first. Then **ASK** children if they have ever made lemonade before. **DISCUSS** the ingredients needed (this will vary, depending on the way children voted for first).

We voted on which way to make lemonade first, with lemons, sugar, and water or with lemonade mix and water. In Talk Time, we counted our votes on the graph. Which way had the most votes? Yes! [type of lemonade]. That's what we will make today.

Build Understanding

[This plan highlights making lemonade with lemons, water, and sugar.]

SHOW children the ingredients and the recipe.

The ingredients we will use to make lemonade are lemons [point], sugar [point], and water [point].

Here is a lemon. How can we get the juice from the lemon?

INVITE children to gently roll the lemons on the table. **CUT** them in half and either squeeze or use a juicer. **AIM** to give each child experience squeezing or juicing.

Let's make our lemon juice. First, we can gently roll the lemons on the table to get them ready to squeeze. Then I'll slice them in half, so we can get the juice out.

- What is it like getting the juice out of the lemon?
- How does it smell?

DIP a toothpick in for each child and let them taste.

- How does it taste?

CONTINUE to work with children to follow the recipe. **ENCOURAGE** collaboration. **ASSESS** if new English learners need support with vocabulary associated with measurement (words like "squeeze" and "cup" have multiple meanings when used in this context).

Now we have our lemon juice. Let's follow the recipe.

- How much water do we need? How will you pour?
- How much lemon juice do we need?
- We need a small amount of sugar. What can we use to measure the sugar?
- Which tool will you use to mix these together?
- What is happening as we mix the ingredients together?

ENCOURAGE children to describe what they observe. **REFER** to the Anchor Chart: "We Can Describe."

Build Experience

INVITE children to taste their lemonade and share what they think. **ENCOURAGE** descriptive vocabulary, such as delicious, sweet, sour, tangy, etc.

Time for our taste test! Try your lemonade. I can't wait to hear what you think!

CHART their responses to the lemonade. **USE** tally marks to record if they liked it or did not like it. **REFER** to the Unit Chart: "Tally Marks." **REVIEW** the results.

Let's vote on whether or not we liked the taste of our lemonade. Write a tally mark here [point] if you liked it; and here [point] if you did not. We can use our tally mark chart to help us.

Let's review the tally marks. What are we learning?

SUMMARIZE the experience of making lemonade by juicing lemons.

Today we made lemonade by squeezing and juicing lemons. Some of the things we noticed were...

Make & Prepare

- Have children wash hands before joining Small Group today. Discuss the importance of hand washing, especially when preparing things you will taste.
- Gather the ingredients you need for the lemonade recipe you are making.
- Make a chart with two headings: "like," and "did not like."
- Write the lemonade recipe on chart paper; adjust for the number of children in your group.

Lemonade Recipe

- Two spoonfuls of lemon juice from a lemon
- Two cups of water
- One spoonful of sugar

Additional Materials

- Cups (enough for each child in your group)
- Provide clean mixing tools (spoons, toothpicks, etc.) for mixing lemonade
- Cutting board
- Knife
- Juicer (optional)
- Anchor Chart: "We Can Describe"
- Unit Chart: "Tally Marks"



Remember to Save

- Save lemon seeds for Unit 7, Week 2.

Build Background Knowledge

Invite children to talk about their experience making lemonade or other drinks at home.



Stretch their Thinking

Add ice cubes to the lemonade. How does the temperature change affect the taste?

Listen/Look For

- What do children notice about making and mixing the lemonade?
- How do children describe their lemonade?



Keep It Going

- While outside, invite children to find other things they can pour or use to fill containers for their science lab.

Greeting Time

Children chant the poem using an excited expression.

Literacy: Literate Attitudes and Behaviors

CONNECT to lemonade mixtures. **ASK** children how they feel when tasting something yummy.

We are making lemonade mixtures. When you get to make and taste something yummy, how do you feel? You can use the “Feelings” chart to help you. Lean and tell a partner.

INVITE children to make an excited expression. **ASK** them how an excited voice might sound.

Many of us feel excited about tasting lemonade! How do you look when you feel excited? Can you make an excited expression? I see your eyes open wide and big smiles!

When you’re excited, how might your voice sound? Yes, it might sound higher or faster.

MODEL and **INVITE** children to act out and chant the “Lemonade Poem” using an excited expression.

Why don’t we use an excited expression and voice to chant and act out our poem?

Lemon juice is sour [squeeze a fist].

But sugar is so sweet [sprinkle with the other hand].

Mix them up with water [hold one hand like a cup and stir with the other].

Then sip your tasty treat [pinch a straw and then make a slurping sound].

Materials

- *Blueprint Songbook*
- Anchor Chart: “Feelings”

Fluency

In this lesson we give children practice with expression, changing the tone of their voice. Expression is one part of fluency. Emerging readers need lots of exposure and practice with hearing how rhythm, pace, and expression can change.



Movement Time

Children combine two “if/then” codes in an AB pattern.

Science: Engineering and Technology

SHOW a spoon and straw. **REVIEW** the “if/then” codes: if you see a spoon, then stir your hips. If you see a straw, then reach your arms up and stretch.

What tools might we use to help us stir [gesture] and then sip [mimic] our lemonade mixtures? Yes, a spoon and a straw. It’s time to use these tools to play our “If/Then” game! Let’s review our codes.

What do we do if we see a spoon? Then we stir our hips [demonstrate]. You try it.

What do we do if we see a straw? Then we reach our arms up and stretch long [demonstrate]. You try it.

PROMPT children to face the same direction, so they can “read” the tools from left to right. **PLACE** six tools in an AB pattern: A=straw, B=spoon. **GUIDE** children to follow the codes in an AB pattern: stretch, stir.

Now let’s put these codes together. I am going to make a pattern. Please name each tool as I place it down: straw, spoon, straw, spoon, straw, spoon.

Look at the first tool. What do we do if we see a straw? Reach up and stretch! Look at the next tool. What do we do if we see a spoon? Stir our hips! The pattern of straw, spoon, straw, spoon, straw, spoon, tells us to stretch, stir, stretch, stir, stretch, stir. Let’s follow the code together. Ready, go!

Make & Prepare

- Have three to five spoons and three to five straws to make an AB pattern.

Responding to Children

Are children able to recognize a simple pattern using manipulatives that vary in size, shape, and color? If so, ask them to find or make patterns of more complex types (e.g. AAB). If not, provide repeated experience over time with objects that focus on one attribute such as color.

Early Coding Skills

The game “If/Then” helps children develop early coding skills. Computer programmers use these types of simple commands to build more complex functions. Children will combine the same two codes in different ways to create several kinesthetic, or movement-based, patterns.

Talk Time

Children role-play to help a puppet calm down.

Social Emotional: Self-Awareness and Self-Concept

USE Sayeh and Elijah, the social emotional puppets to act out the “If/Then” game. **Make** Elijah’s voice sound frustrated.

Our friends Sayeh and Elijah want to play the “If/Then” game, too!

“Ugh! I can’t remember the codes! I don’t want to play anymore! Grr...”

ASK children how he is feeling.

How do you think Elijah is feeling? Why? Yes, he might be feeling frustrated. He might feel upset.

REFER to the Power of 3: “Calm down.” **SHOW** some of your calming tools from the Calm Corner. **ASK** children how to help Elijah.

In our classroom community, we try to take care of ourselves when we feel upset. We have many ways we can calm ourselves down [refer to the calming tools]. How can we help Elijah take care of himself?

Who wants to be Sayeh, and talk to Elijah about one way he can take care of himself?

Who wants to be Elijah?

GIVE children more opportunities to use the puppets to share their ideas.

Materials

- Sayeh and/or Elijah, the social emotional puppets
- Anchor Chart: “Feelings”
- Anchor Chart: “Power of 3”
- Examples of calming tools from your Calm Corner

Executive Function

Teaching self-regulation begins with listening to children and accepting—without judging—how they are feeling. Helping them identify their feelings and working with them to come up with solutions is how children learn self-regulation.

Before

REVIEW the letters on the letter ring in a different order. **ASK** children what the letter name is and what sound the letter makes. Then **CONNECT** to learning that lemons grow on trees. **SHOW** the cover of *When Grandma Gives You a Lemon Tree*. **DISCUSS** how olives grow on trees.

We've been talking about how lemons grow on trees [show the cover of the book]. Do you know anything else that grows on trees?

Here's one thing I know grows on trees: olives! This is a picture of an olive tree, and here is an olive [show]. Have you ever eaten an olive? What shape are they?

FOCUS on words that begin with the /o/ sound.

On, olive. What sound do you hear at the beginning of these words [hold hand up to your ear]? Yes, /o/. Does anyone in our class have a name that begins with the /o/ sound?

DESCRIBE how to form the *letter o* as you write the letters in the corner of your board. **INVITE** children to skywrite the letters. **Optionally, teach the ASL sign.**

The *letter o* makes the /o/ sound. To write an uppercase *letter O*, I start at the top and curve all the way around. Now you write it with your finger in the air. This is the lowercase *letter o*. I curve all the way around. Now you try it. While I write today, please look for the *letter o*. We are going to learn how to read it together.

During

DRAW a picture of an olive. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

Here is a picture of an olive. They are round. How many olives would you eat?

Suggested message: "Olives grow on trees."

PAUSE to focus on phonological awareness (/o/ in the word "olives").

I hear the /o/ sound in the beginning of the word "olives." The *letter o* makes the /o/ sound. Watch me as I write the uppercase *letter O*. I start at the top and curve all the way around. Now you try it.

REPEAT with the lowercase *letter o* in the word "on." After, **INVITE** children to reread the message with you.

After

INVITE children to find all the *letter o*'s in the message. **CIRCLE** them.

Let's find all the *letter o*'s. Put on your "I spy" goggles like this [demonstrate], and look for the *letter o*! Who wants to point to one in the message?

Play "Look Like the Letter." **MODEL** and then **INVITE** children to make a *letter o* with their arms when they hear a word that begins with the /o/ sound.

We can make our body look like the *letter o*, like this [demonstrate]. Do I look like a *letter o*? How do you know? Everyone stand up and make your arms into the shape of the *letter o*. Now let's sit back down and get ready to play a game. When you hear a word that begins with the /o/ sound, stand up and make the *letter o* in the air with your arms. If the word I say doesn't start with the /o/ sound, sit back down. Try it with me! The word is "otter." What should we do? /o/, "otter" begins with the *letter o*. Let's stand up and make a *letter o* in the air with our arms!

RESTATE the name and sound of the *letter o*.

Today, we listened to the sound the *letter o* makes, talked about what it looks like, and found it in our message. We learned that "olive" has the /o/ sound at the beginning.

REREAD the message one more time.

[Transition] **INVITE** children to pretend to pick an olive off a tree and practice the /o/ sound.

Imagine you are reaching up to pick an olive off an olive tree! /o/, /o/, /o/, olive!



Make & Prepare

- Review the standard pronunciation of the short o vowel sound on the *Blueprint* website.
- Familiarize yourself with the ASL sign for the *letter o* on the *Blueprint* website.
- Letter Ring – write the uppercase *letter O* on one side of an index card and the lowercase *letter o* on the other; add this to the Letter Ring after the lesson.
- Download and print a picture of an olive tree and an olive.

Additional Material

- The book *When Grandma Gives You a Lemon Tree*

Letter Formation

- Uppercase *letter O* — curve all the way around
- Lowercase *letter o* — curve all the way around

Vowel Sounds

Vowels do a lot of work in English. There are five vowels (*a, e, i, o, u*) but 20 vowel sounds. Where a vowel is in a word and the letters that surround it will determine how it is pronounced. For example, a short vowel will never occur as the last letter of a word in English. A short vowel is the sound the vowel makes in the consonant-vowel-consonant (CVC) letter pattern. Using the word "short" does not indicate or relate to the length of time the vowel is pronounced.

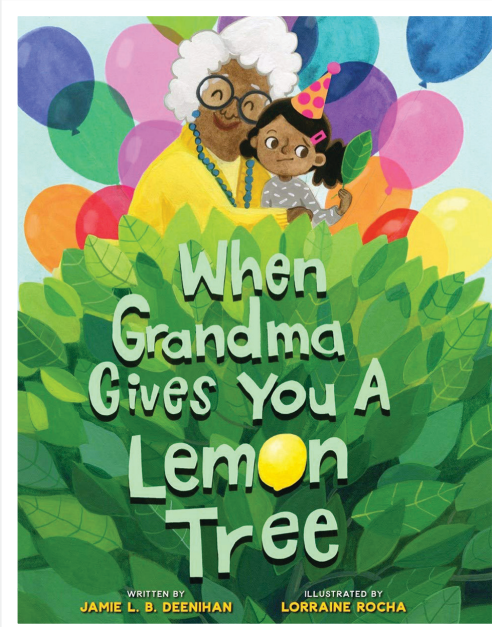
Pronouncing the Sound

When you make the /o/ sound, you open your mouth and relax your tongue. The sound for the short o is /ah/ as in olive, omelet, ox, and octagon.



Keep It Going

- Bring in olives for children to taste! Or ask families to send in examples of their favorite types of olives.
- Join children at the math center. Teach them about octagons. Do they hear the /o/ sound? Help them use several tangrams to create an octagon.



Material

- Anchor Chart: "Feelings"

Responding to Children

You will probably find that children repeat each other's answers. Be kind about it and make connections. For example, you can say, "Wow you have the same idea as [name]... if you think of something else, let us know." Or, you can say, "Wow, you and [name] both thought she felt upset!"

Connections to Other Units

This book shows how lemons grow on lemon trees. In Unit 7: "Let's Eat!" we will take a deeper dive into the life cycle of plants. Children will explore how seeds grow into plants, and how plants then bear more seeds. This unit also will feature several books that depict growing gardens full of food.

Following Up

Remember to consult your observation binder as you adapt lessons to meet your children's needs. You might find it helpful to create a schedule for observing children at various times of the day (large group, small group, center time, playground time) so you make sure you collect information about all your children.

Before

POINT OUT the girl's facial expression on the front cover. **DISCUSS** how she feels. **REFER** to the Anchor Chart: "Feelings." **SET THE FOCUS:** Notice how her feelings change.

We read this book *When Grandma Gives You a Lemon Tree*. Take a look at the cover. Look closely at the girl's face. How do you think she feels? Why? You can use the "Feelings" chart to help you.

Yes, she looks a little disappointed or sad. But just like us, she can have lots of different feelings. As we read, let's notice how the girl feels in the beginning, the middle, and at the end of the book.

During

PAUSE after "And definitely not this." **DISCUSS** the character's feelings.

When the girl gets the lemon tree, is she really excited? No, she is only acting, or pretending, to be excited. Can you make an excited expression?

How does she really feel? Why? Yes, she is upset because she didn't want a lemon tree. She wanted one of the gadgets on her birthday wish list.

How does her expression look here? Can you make a grumpy face, too?

How about here? Yes, she looks so upset. Can you show what you look like when you're really upset?

PAUSE after "Come out, come out, wherever you are!" **DISCUSS** how her feelings changed.

At first, the girl was not excited about getting the lemon tree. She was so upset that she was even joking about getting rid of it! But what does she do instead?

Yes, she decides to take care of the lemon tree. Now she is even having fun decorating it and playing with it. How do you think she feels about the lemon tree now?

PAUSE after "Now you can finally buy exactly what you want." **DISCUSS** why she now prefers to buy plants over the original gadgets on her list.

In the beginning, what did the girl want to buy at the store? Here are some of those gadgets on the shelves. But now is she going to get a robot or computer? Why not?

Yes, because her feelings have changed. Now she really likes the lemon tree. She enjoyed taking care of it, playing with it, and using the lemons to make lemonade. She realizes that the plant made her feel happy after all!

After

DISCUSS how the girl feels at the end toward her community, her grandma, and the gift.

How is the girl feeling at the end? How can you tell? Use the "Feelings" chart...

Yes, she is feeling kind and caring. She used the money she earned to get plants for her community. Look at the neighbors enjoying their new garden. That was kind of her to make others feel happy too!

And what is she doing with her grandma? Yes, she is giving her flowers and a big hug. She feels thankful to her grandma for getting her such a wonderful gift.

In the end, the lemon tree not only makes the girl feel happy, but her grandma and the whole community, too!

Build Interest

[This plan highlights making lemonade with powder mix and water.]

SHOW children the lemonade mix. **DISTRIBUTE** a little bit of the powder mix on a paper plate for children to investigate.

Today we will use lemonade mix to make our drink. Here is a little bit of the powder mix for you to investigate with your senses (but not tasting yet). What do you notice?

ASK children to recall mixing with powders and predict what will happen when this powder is added to water.

We've done lots of mixing recently! What do you predict will happen when we mix this powder with water?

Build Understanding

SHOW the recipe and materials for making lemonade with the powder mix. **WORK** together to mix the lemonade powder and water. **REFER** to the Anchor Chart: "We Can Describe."

Let's review the recipe.

- First, we pour water into the cup. How should you pour? Fast? Slow? How much should you pour into your cup?
- Next, let's add the lemonade powder.
- What do you think it might taste like if we added too little mix? Too much?
- Now let's stir.
- What's happening to the mixture?

Build Experience

INVITE children to taste their lemonade and share what they think. **ENCOURAGE** descriptive vocabulary such as delicious, sweet, sour, tangy, etc.

Time for our taste test! Try your lemonade. I can't wait to hear what you think!

CHART their responses to the lemonade. **USE** tally marks to record if they liked it or did not like it. **REFER** to the Unit Chart: "Tally Marks." **REVIEW** the results.

Let's vote on whether or not we liked the taste of our lemonade. Write a tally mark here [point] if you liked it, and here [point] if you did not. We can use our "Tally Marks" chart to help us.

Let's review the tally marks. How many tally marks are on each side? What does that tell us? Did the children in our group like the taste of this lemonade?

Then **SUMMARIZE** the experience of making lemonade by mixing powders.

Today we made lemonade by mixing powders. Some of the things we noticed were...

Make & Prepare

- Have children wash hands before joining Small Group today. Discuss the importance of hand washing, especially when preparing things you will taste.
- Gather the ingredients you need for the lemonade recipe you are making.
- Make a chart with two headings: "like," and "did not like."
- Write the lemonade recipe on chart paper; adjust for the number of children in your group.

Lemonade Recipe

- Water
- Lemonade Powder

Additional Materials

- Cups (enough for each child in your group)
- Provide clean mixing tools (spoons, toothpicks, etc.) for mixing lemonade
- Anchor Chart: "We Can Describe"
- Unit Chart: "Tally Marks"

Building Background Knowledge

Encourage children to use sensory vocabulary to describe the taste of lemonade.



Stretch Their Thinking

Invite children to think about what other investigations could grow from this one? What other fruits could they use? How would they mix them together?

Listen/Look For

- What action words do children use?
- Are children describing measurements correctly?
- How do children describe their lemonade?



Robust STEM Activities

Special tools are used to measure ingredients. Children will benefit from more time learning how to use them. Support children on the basics of volume measurement. For example, teach them that when they are trying to measure one cup of powder, that means they need a measuring cup that holds one cup, and it has to be filled all the way up. Teach them that when they follow a recipe, they have to be careful to fill each cup all the way up so their mixture will come out like they want it to.

Greeting Time

Children chant about another drink mixture.

Literacy: Literate Attitudes and Behaviors

CONNECT to lemonade mixtures. **INVITE** children to name another drink mixture (e.g. chocolate milk). **ASK** them to name and describe ingredients to mix together.

We have been making lemonade mixtures. But what other drink mixture can we make?

What ingredients do we need to mix?

How would we describe those ingredients?

CHANGE the words of the poem. **MODEL** and **INVITE** children to chant and act it out.

Let's change the "Lemonade Poem" to be about making chocolate milk!

Milk is kind of creamy [pour with one hand].

Chocolate powder is sweet [sprinkle with the other hand].

Stir them up together [stir the cup].

Then sip your tasty treat [pinch a straw and slurp].

Can you chant and act out the poem about making chocolate milk?

Material

- Blueprint Songbook



Choice

Choice allows children to explore their growing independence. It gives them a sense of empowerment. If children find making choices challenging at times, give them options. You can say, "Do you want to sing about chocolate milk or hot cocoa?"

Movement Time

Children follow "if/then" codes in an AABB pattern.

Science: Engineering and Technology

SHOW a spoon and straw. **REVIEW** the "if/then" codes: if you see a spoon, then stir your hips. If you see a straw, then reach up and stretch.

How could these tools help us make and taste chocolate milk? Yes, we could stir and sip. We can also use these tools to play our "If/Then" game. Let's review our codes.

If we see a spoon, then what do we do? Show me... Stir our hips!

If we see a straw, then what do we do? Show me... Reach up and stretch!

PROMPT children to face the same direction, so they can "read" the tools from left to right. **PLACE** down eight to 12 tools in an AABB pattern (A=straw, B=spoon): **straw, straw, spoon, spoon.**

Let's put these codes together. I'll make a pattern. Name each tool as I place it down: straw, straw, spoon, spoon...

GUIDE children to follow the codes in an AABB pattern: **stretch, stretch, stir, stir.**

As I point to each tool, tell what it means we will do. Reach and stretch, reach and stretch, stir our hips, stir again.

So the pattern of straw, straw, spoon, spoon, tells us to stretch, stretch, stir, stir. Let's follow the code together. Ready, go!

Make & Prepare

- Have four to six straws and four to six spoons to make an AABB pattern that repeats two to three times.

Growing Mathematicians

"If/then" statements expose children to repeated experiences with patterns and basic coding principles. They begin to see, look for, and predict what will come next, or what they will do if they see or hear a certain instruction.



Talk Time

Children predict what will happen to a drink mixture that sits still.

Science: Scientific Inquiry and Practices

INVITE a child to add two spoons of chocolate powder to a cup of milk. **ASK** children what they notice about the mixture while it is still.

Here we have ingredients for a drink mixture: chocolate powder and milk. What do you think we can make?

Who can add two spoons of chocolate powder to this cup of milk? What do you notice when the mixture is still? Yes, the powder is kind of separate from the milk.

INVITE a child to stir the mixture. **ASK** children what they notice about the mixture now.

How do you predict the mixture will change if we stir it?

Who can stir it? What is happening to the powder and milk? Yes, the ingredients move around and mix together.

ASK children to predict what will happen to the mixture if it sits still.

I wonder what would happen if we stop stirring and let this mixture sit still for a while? Do you think it will change? How?

Let's keep it still and observe it later to find out.

Make & Prepare

- Bring ingredients for a drink mixture that will separate in a few hours, such as chocolate powder and a clear cup of milk.

Remember to Follow Up

Remember to check on the chocolate milk later in the day to help children notice how some of the powder settles over time.



Before

CONNECT to the read aloud *When Grandma Gives You a Lemon Tree*. **FOCUS** on the word “dazzling.” **POINT** to the word on the Unit Chart: “Words We Are Learning.”

When we learn new words, it helps us to describe things in new ways. When we read the book *When Grandma Gives You a Lemon Tree* [show book], the author used the word “dazzling” to describe something that is bright and shiny [point to the word on the chart]. Say that with me: dazzling. Let’s count the beats or syllables: daz-zling [touch head, shoulders]. How many beats is that?

SHOW the picture and **READ** the marked page in the book. **INVITE** children to make the “I hear” sign when they hear the word “dazzling.”

Look at the picture and listen for the word “dazzling” as I read from the book. Make the “I hear” sign [demonstrate] when you hear the word “dazzling.”

INVITE children to make a “dazzling” smile.

Look closely at the picture again. See how bright and shiny her smile is? It is dazzling. Let’s all practice making a “dazzling” smile, just like the girl in the book.

Let’s keep thinking about the word “dazzling!” Listen for it in the message today.

During

DRAW a girl at a lemonade stand. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

Here is the girl at the lemonade stand. She has a big smile on her face. What else does she need at the lemonade stand?

Suggested message: “She had a dazzling smile.”

PAUSE to focus on vocabulary (the word “dazzling”).

I want to write the word that describes something bright and shiny. What word do I want to use? [encourage children to recall the word “dazzling”] Yes, “dazzling” is another word for bright.

INVITE children to reread the message with you.

After

INVITE a volunteer to find the word “dazzling” in the message. **DRAW** a box around it to emphasize the concept of a word. **ASK** children to define the word.

Who would like to come point to the word “dazzling” in the message? How do you know that is the word “dazzling?” What does it mean?

SHOW images of objects. **ASK** children to sign “yes” if they think the object is dazzling or “no” if they do not. **INVITE** them to explain their thinking.

We can describe our smiles as “dazzling,” and we can also use that word to describe other bright and shiny things. I’m going to show you a picture. Sign “yes” [demonstrate] if you would describe it as dazzling. Sign “no” [demonstrate] if you would not. Then let’s talk about why.

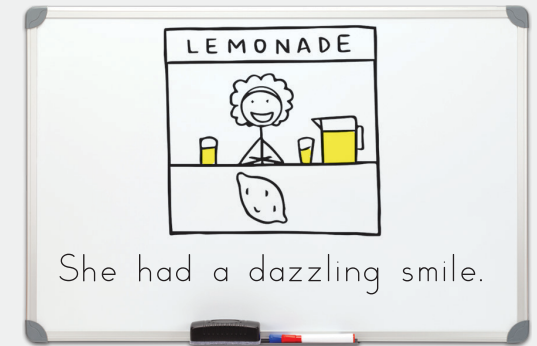
REVIEW the meaning of the word “dazzling” again.

Today we learned the word “dazzling.” The word “dazzling” describes when something is very bright and shiny. We made our own dazzling smiles, just like the girl in the book. And we named things that are dazzling, like the sun and fireworks.

REREAD the message one more time.

[Transition] **INVITE** children to think about how they would “teach” the vocabulary word to someone at home.

When you go home, why don’t you teach someone in your family what the word “dazzling” means? Let’s rehearse what you might say and do. Tell your partner what dazzling means.



Make & Prepare

- Have the book *When Grandma Gives You a Lemon Tree* ready. Mark the page that begins “4. Flashy lemonade stand. Cue a dazzling smile” with a sticky note.
- Download and print images of objects that might be considered dazzling (fireworks, the sun) and objects that might not.
- Review the ASL sign for “I hear,” “yes,” and “no” on the *Blueprint* website.

Additional Material

- Unit Chart: “Words We Are Learning”

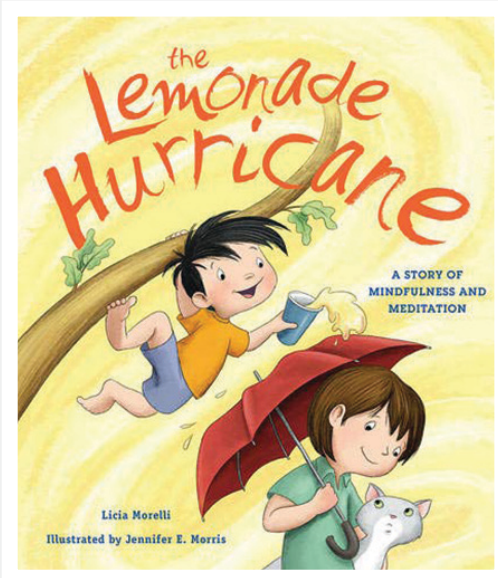
Vocabulary Beyond the Lesson

- Acknowledge children’s attempts to use new vocabulary in different situations. Today, children will focus on the word dazzling. As with other vocabulary words, model using the word throughout the unit and beyond. When you hear children use the word, draw attention to their attempts and reiterate the definition of the meaning to bring clarity to the word and usage. For example, when outside at the playground on a sunny day, a child might say, “The sun is dazzling today.” Back in the classroom, you could share this observation with the group by saying, “Isaac noticed that the sun was dazzling today. It was so bright that he had to hold a hand up to cover his eyes!”
- In addition, when you notice opportunities to replace a word with a rich vocabulary word previously learned, take the time to model this. If a child says, “Wow! The sun is bright today!” You might add, “I agree. We learned a word that describes when something is extremely bright. Do you remember the word? Dazzling. Would you say the sun is dazzling today?”



Keep It Going

- Gather children in a small group. Invite them to think about a compliment for another child in the group. Encourage them to use their new vocabulary word “dazzling” in their compliment. For example, “Tina’s shirt has beautiful sparkles on it. It is dazzling!”



Materials

- Clear cup of water
- Anchor Chart: "Power of 3"
- Anchor Chart: "Feelings"
- Unit Chart: "Words We Are Learning"
- Sayeh or Elijah, the social emotional puppets
- Mindful Moment basket

Words We Are Learning

hurricane: a big storm with wind and rain

Vary the Lesson

You made a mixture during Talk Time. If the powder in the mixture has settled to the bottom of the cup, use that to introduce the notion of "settling down" in this read aloud.

Executive Function: Expressing Feelings

Children feel the same range of emotions that adults do. However, they are at the beginning stages of learning how to express these feelings in socially acceptable ways. It is best to address these ideas when children are calm, and not in the midst of strong emotions. This gives them a better opportunity to use the information when needed.

Interacting with Children

We often use puppets to help children learn social emotional skills. Children may be more comfortable relating to a toy or stuffed animal. At Center Time, join pretend play using children's toys and embodying them with voice and personality.



Before

SHOW a clear cup of water. **ASK** children to describe what they see.

Here is a cup of water. What do you notice?

Yes, the water is clear and is still. What do you think will happen if I put this spoon [show] in the cup and start stirring it?

STIR the water vigorously. **ASK** children to describe what they see.

Now what do you notice? Yes, the water is moving all around. If I stop stirring what will happen to the water?

CONNECT the change to feeling upset versus calm. **INTRODUCE** the book.

First the water was still and calm. Then it was bubbly and stirred up. Then it was still and calm again.

This change reminds me of different feelings we can have [refer to the Anchor Chart: "Feelings"]. When we feel upset, it is like we are getting all stirred up! But when we take a moment to settle down and be still, we feel calm.

Today we are going to read a book about calming down [refer to the Anchor Chart: "Power of 3"]. The title is *The Lemonade Hurricane*. It is written by Licia Morelli and illustrated by Jennifer Morris.

EXPLAIN what a hurricane is. **ADD "hurricane" to the Unit Chart: "Words We Are Learning."** **INVITE** children to share other words they know that mean the same thing (in English or their home language). **ASK** what they think a lemonade hurricane could be.

What is a hurricane? Yes, a hurricane is a big storm with strong wind and lots of rain. Let's add "hurricane" to the list of words we are learning. Do you know any other words that mean the same thing?

What do you think a lemonade hurricane could be?

SHOW the cover. **SET THE PURPOSE:** To find out what the lemonade hurricane is.

Look at the cover of *The Lemonade Hurricane*. What do you notice? Yes, it looks like the boy is spilling a cup of lemonade on the girl under the umbrella. What are you thinking about when you see this picture?

I wonder if he is trying to make a lemonade hurricane? Let's read to find out!

During

PAUSE after "Sometimes I like to stop and rest." **POINT OUT** that she practices mindfulness.

What is Emma doing? Yes, she is practicing mindfulness. She is sitting still with her eyes closed. She is being quiet and focusing on her breathing. How do you think she feels? Yes, she's calm.

We do mindfulness exercises, too! It is important to take care of ourselves by stopping to rest. We can calm ourselves down or help ourselves stay calm.

PAUSE after "but it doesn't always work." **DISCUSS** how Henry is like a lemonade hurricane.

Why does Emma say that Henry is like a lemonade hurricane? Yes, because he acts like a big storm. It's like he is a drink mixture that is being stirred up! He is always moving and never sitting still or being calm.

When Henry acts like a lemonade hurricane, how does it make Emma feel? Why? You can use the "Feelings" chart to help you.

PAUSE after "The next day..." **ASK** children if they think Henry will calm down.

What does Emma want to do? How do you think she will show Henry how to calm down? Have a look at Henry. Do you think he will take care of himself by calming down?

After

USE Sayeh, the puppet, to talk. **SUMMARIZE** different reasons to calm ourselves down.

"Friends, that mindfulness exercise helped Henry to calm down. Sometimes we need to calm down when we feel upset. Sometimes we need to calm down when we feel too busy and wild. And sometimes we can just take a moment to keep ourselves feeling calm."

REFER to the Mindful Moment cards. **INVITE** a child to select one and practice that exercise.

We have many ways to calm ourselves down as well. Who would like to select a Mindful Moment card from our basket? We can practice some mindfulness right now ourselves!

Build Interest

SHOW photographs and other artifacts that show how children counted while making mixtures. **ASK** children why counting the quantity of ingredients was important in small groups.

While we have been making mixtures, we've done lots of counting. Why do you think it was important that we counted our materials or ingredients?

INVITE children to carefully explore the tub of sand with the cups.

Today, we are going to do some more counting. We are going to use sand [point] and these cups [show]. Take a few minutes to practice scooping and pouring the sand [demonstrate] in this tub.

Build Understanding

SHOW one empty container. **INVITE** children to brainstorm how to find out how many scoops of sand it takes to fill the container.

Here is a container [point]. Let's think more about filling it. I wonder how many scoops of sand it will take to fill the container. How can we find out?

Ok, you said [summarize].

- How would you know the container is full?
- How can we make sure we are measuring fairly and that each scoop has the same amount of sand in it?
- How could we keep track of how many scoops of sand it takes to fill the container?

ASK children to recall and explain how to use tally marks. **REFER** to the Unit Chart: "Tally Marks."

Yes, we can use tally marks to keep track of how many scoops of sand it takes to fill this container. How do we write tally marks? You can look at the tally mark chart to remember [point to the chart]. How do tally marks help you with counting?

WORK together on filling the container and tracking the number of scoops. **REFLECT** on what they are noticing and learning.

Build Experience

GIVE each partnership one tub of sand, a scooper, another empty container, their science journal, and a pencil. **ASK** them to scoop sand into the container and add tally marks in their science journal.

We just worked together to fill this container with sand. We learned it took [number] scoops of sand to fill it. Now you can work with a partner to fill a different container and keep track of how many scoops of sand it takes.

- Do you think it will take more scoops of sand or less scoops to fill this new container? Why?
- How will you and your partner share the work? Will you take turns scooping the sand? Will one person record the tally marks?

Remember to measure fairly. Be sure to fill up each scoop all the way to the top each time.

SUMMARIZE the activity. **USE** what you know about each child's language skills to include and extend participation.

Today we scooped sand into containers and kept track with tally marks. Let's discuss:

- Gesture: How many scoops filled your container? Show me with your fingers. Point to the container that held more.
- Yes/No: Did any of the groups scoop different amounts? Did this container hold more? Did this one?
- Either/Or: Did all of the groups scoop the same amount, or did some scoop a different amount? Did this container or this container hold more sand?
- Open-ended: What did you learn about how much the containers could hold? How did using tally marks help you today?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make and Prepare

- Download, print, and add a copy of "How Many Scoops of Sand?" to children's science journals (one per child).
- Cover the table with newspaper or a reusable tablecloth for easy clean up.

Additional Materials

- One container for the group
- Tubs of sand (one per partnership)
- Cups for scooping (one per partnership)
- Larger containers (one per partnership)
- Science journals
- Writing tools
- Unit Chart: "Tally Marks"



Remember to Save

Save the containers and cups for Small Group Days 19 and 20 to keep the measurement and comparison activities fair.

Build Background Knowledge

Review how to make tally marks. Work together to write tallies for the number of jars and cups you collected for this activity.

Stretch Their Thinking

Compare quantities of sand in different sized containers. Invite children to predict, scoop, and keep track with tallies.

Listen/Look For

- What do children understand about measuring?
- What do children know about tally marks?



Growing Mathematicians

Attending to precision is one of the key practices in learning and doing math. When children learn how to measure correctly by filling each scoop to the top in the same way (i.e., making sure all units we use to measure are identical), they are attending to precision. Young children will often be inaccurate with measurement units to some extent as they are learning. That's perfectly ok. The important point is to support children to begin to pay attention to the importance of precision.



Measuring Volume

Children will be working with measuring volume in the next two Small Groups. They will practice measuring precisely, using tallies to keep track, and making comparisons. Children will get to see a foundational idea in volume measurement that larger containers hold more. They will also learn that they can measure and compare volumes fairly when they use the same unit (scoops in this case).

Greeting Time

Children make up a wacky mixture.

Literacy: Literate Attitudes and Behaviors

CONNECT to lemonade mixtures. **INVITE** children to suggest ingredients for a wacky mixture (i.e. lemon juice and chocolate powder).

We have been making lemonade mixtures. In our “Lemonade Poem” what ingredients do we mix? Yes, one lemonade mixture is sour lemon juice, sweet sugar, and water. This recipe makes a tasty treat!

But what if we make a wacky mixture [point to the word on the Unit Chart: “Words We Are Learning”]? What ingredients could we mix together that would be wacky?

CHANGE the words of the poem. **MODEL** and **INVITE** children to chant and act it out.

Let’s change the poem to be about this wacky mixture!

Lemon juice is sour [squeeze a fist].

Chocolate powder is sweet [sprinkle with the other hand].

Mix them up together [stir the cup].

Then sip your wacky treat [pinch a straw and slurp].

Can you chant and act out our poem about the wacky mixture?

How did that drink mixture taste? Wacky!

Material

- *Blueprint Songbook*
- Unit Chart: “Words We Are Learning”



Reinforcing Vocabulary

Using robust vocabulary with children is essential to their growth as learners. Use words that were already taught to reinforce children’s understanding of them. The word “wacky” was introduced on Day 14: Intentional Read Aloud.

Movement Time

Children follow “if/then” codes in an ABB pattern.

Science: Engineering and Technology

SHOW a spoon and straw. **REVIEW** the “if/then” codes: if you see a spoon, then stir your hips. If you see a straw, then reach up and stretch.

It was fun to make up a wacky mixture! Let’s have more fun playing a game of “If/Then.” Who can remind us of our codes?

Yes, if we see a spoon, then what do we do? Show me... Stir our hips!

And if we see a straw, what do we do? Show me... Reach up and stretch!

PROMPT children to face the same direction, so they can “read” the tools from left to right. **PLACE** down nine tools in an **ABB pattern (A=straw, B=spoon): straw, spoon, spoon.**

Now let’s put these codes together. I’ll make a pattern. Name each tool as I place it down: straw, spoon, spoon...

GUIDE children to follow the codes in an **ABB pattern: stretch, stir, stir.**

As I point to each tool, tell what it means we will do: Stretch up... Stir our hips... Stir again! So the pattern of straw, spoon, spoon, tells us to stretch, stir, stir. Let’s follow the code together. Ready, go!

Make & Prepare

- Have at least six spoons and three straws to make an ABB pattern that repeats three times.

Modifying the Movement

If children need more practice with following the codes, repeat the AB pattern. You can try more complex patterns when children are ready.

Talk Time

Children listen to the class book about mixing.

Literacy: Listening and Speaking

READ the class book *Learning about Mixing*.

We might use tools to help us mix things together. It has been interesting to make different mixtures!

Each of you wrote about what you are learning about mixing. Let’s read our class book *Learning about Mixing*.

PAUSE one to three times to **ASK** children what they are learning. **ENCOURAGE** them to use the sign and sentence stem, “I learned.”

Are you learning something new as I read our class book? If so, you can make the “I learned” sign [demonstrate]. You can say, “I learned...”

CLOSE with a cheer.

We are scientists like Scientist Ahmed [show photo]. Let’s celebrate our mixing and learning with a cheer! Who would like to choose one from our cheer chart?

Make & Prepare

- Bring the completed class book *Learning about Mixing*.
- Review the ASL sign for “I learned” on the *Blueprint* website.

Additional Materials

- Anchor Chart: “Readers Can Say”
- Anchor Chart: “Cheers”
- Photo of Scientist Ahmed

Keep It Going

- Remind children they can read this class book and others in the library.



Before

CONNECT to the read aloud *When Grandma Gives You a Lemon Tree*. **DEFINE** the word “pinch.”

In the book *When Grandma Gives You a Lemon Tree*, the girl and her grandma make lemonade. When they are making their lemonade mixture, they need different amounts of ingredients. The author uses the word “pinch” to describe a small or tiny amount of something. Say that with me: pinch. Let’s count out the beats: pinch [touch head]. How many beats is that?

SHOW the picture and **READ** the marked page in the book. **INVITE** children to make the “I hear” sign when they hear the word “pinch.”

Look at the picture and listen for the word “pinch” as I read from the book. Make the “I hear” sign [demonstrate] when you hear the word “pinch.”

INVITE children to imagine taking a pinch of powder.

Let’s imagine we are taking a pinch of powder for a mixture we are making. Reach into the pretend bowl, use your finger and thumb, take a pinch like this [demonstrate]!

Let’s keep thinking about the word “pinch!” Listen for it in the message today.

During

DRAW a hand with the pointer finger and thumb pinching together. **DESCRIBE** what you are thinking and drawing. **INVITE** children to contribute.

I want to draw a hand taking a pinch of salt. Which fingers do you use to take a pinch?

Suggested message: “We can add a pinch of salt.”

PAUSE to focus on vocabulary (the word “pinch”).

I want to write the word that describes taking a small amount of something. What word do I want to use? [encourage children to recall the word “pinch”] Yes, “pinch” means a small amount.

INVITE children to reread the message with you.

After

INVITE a volunteer to find the word “pinch” in the message. **DRAW** a box around it to emphasize the concept of a word. **ASK** children to define the word.

Who would like to come point to the word “pinch” in the message? How do you know that is the word “pinch?” What does it mean?

SHOW children a bowl of full of pom-poms. **TAKE** a pinch and release it into the bowl.

When you are making a mixture, you might take a pinch of something. Here are some pom-poms. I can take a pinch of them from the bowl and pick up one or two pom-poms [demonstrate].

DISTRIBUTE bowls of pom-poms to groups of children. **INVITE** them to practice taking pinches.

Let’s get some practice taking a pinch of pom-poms from our bowls. A pinch is a small amount that fits between your finger and thumb. Do you pick up a lot of them or only one?

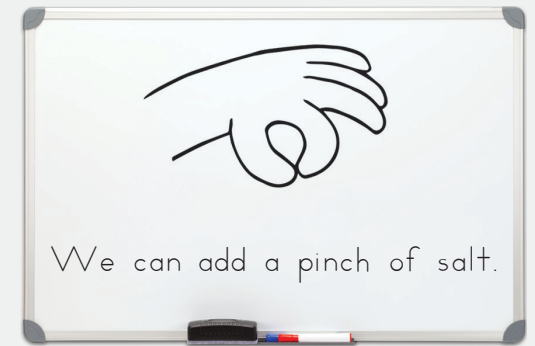
COLLECT the materials. Then **REVIEW** the meaning of the word “pinch” again. **ADD** “pinch” to the Unit Chart: “Words We Are Learning.” **INVITE** children to share words they know that mean the same thing (in English or their home language).

Today we learned the word “pinch.” When you take a pinch of something, you take a small amount, just enough that you can hold it between your finger and thumb. Let’s add the word “pinch” to the list of words we are learning! Do you know any words that mean the same thing?

REREAD the message one more time.

[Transition] **INVITE** children to think about how they would “teach” the vocabulary word to someone at home.

When you go home, why don’t you teach someone in your family what the word “pinch” means? Let’s rehearse what you might say and do. Tell your partner what it means to take a pinch of something.



Make & Prepare

- Have the book *When Grandma Gives You a Lemon Tree* ready. Mark the page that begins “Gather these items” with a sticky note.
- Add pom-poms to three-to-five bowls.
- Review the ASL sign for “I hear” on the *Blueprint* website.

Additional Material

- Unit Chart: “Words We Are Learning”



Words We Are Learning

pinch: a small amount of something

Fine Motor Skills

Strengthening the pinch grip supports children’s handwriting skills. Encourage children to use their thumb and one or two fingers as they work on their pinch during this lesson. Remind children to only pinch the materials, not themselves or each other!

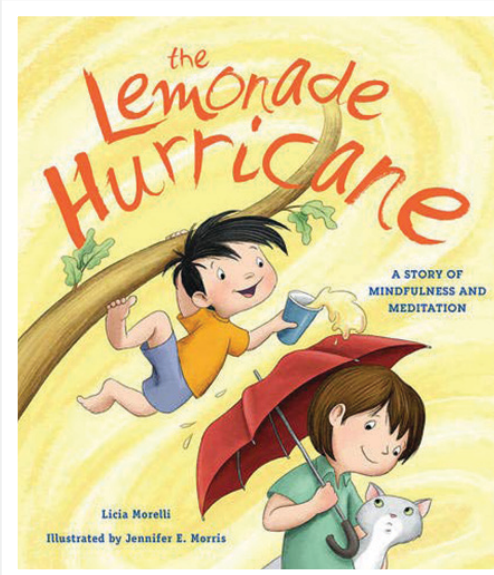
Vocabulary Development

Depending on the context, many words can be used as either nouns or verbs. For example, in this lesson, the word “pinch” means a small amount of something. But it can also refer to the act of taking a small amount (“pinch off the tip of the green bean”). Make sure to demonstrate and/or act out words to explain the difference. So children understand how to use the word, point out the meaning, too. Other words that can be nouns or verbs include “bank” and “brush.”



Keep It Going

- While children are eating snack, encourage them to pick up their snack by pinching it like they did the pom-poms. Invite children to use the word pinch to describe the amount of snack they picked up.
- Encourage children to think about how you can use other tools besides your fingers to pinch. Provide children with other types of tools to pinch like tweezers and tongs to pinch the pom-poms. Together talk about how their experiences were similar and different to pinching the pom-poms with the tweezers verse their fingers.



Make & Prepare

- Download and print the “Sit, Bow, Breathe” card.

Mindful Moment

We can use calming strategies or mindfulness exercises to calm ourselves down when we feel upset or too busy. But remind children that we also can practice being mindful when we feel fine! These kinds of exercises can help us be more focused, centered, and peaceful in our everyday lives.



Before

RECAP how Henry is like a lemonade hurricane. **REVIEW** how mindfulness helps them feel calm.

We read *The Lemonade Hurricane*. In the beginning, why does Emma say Henry is like a lemonade hurricane? Yes, he is always moving like a big storm. Like a mixture getting all stirred up, Henry is too busy and wild.

How does Emma try to help Henry take care of himself? Yes, she shows him how to practice mindfulness. When she is mindful, she is still. She pauses to rest her body and mind. She feels calm and peaceful. Learning to be mindful helps Henry calm down, too.

SET THE FOCUS: To practice the mindfulness the characters use.

As we reread *The Lemonade Hurricane* today, notice how the characters practice being mindful. We can practice their mindfulness, too.

During

PAUSE after “Breathe.” **ASK** children to name the steps in the mindfulness exercise.

Emma is practicing mindfulness. What does she do first? Sit. What does she do next? Bow. What does she do then? Breathe.

Emma practices the Mindful Moment “Sit, Bow, Breathe” [show card]. Let’s keep reading to learn more about how to practice it.

PAUSE after “When I sit... smell the grass.” **ASK** children what Emma observes as she sits. **INVITE** them to sit still and share what they observe.

What is Emma doing? Yes, she is sitting still, or not moving. But she is using her senses to observe what is around her. As she sits, what does she observe? She feels the ground beneath her, hears the birds chirping, and smells the grass.

Can you sit still like Emma? Pause for a moment. What do you observe with your senses?

PAUSE after “When I bow...for miles and miles.” **ASK** children what Emma imagines as she bows. **INVITE** them to bow and share what they imagine.

What is Emma doing? Yes, she is connecting her hands and bowing her head down. As she bows, what does she imagine? Yes, she imagines she is on top of a mountain looking far away.

Can you bow like Emma? Connect your hands and gently bow your head [demonstrate]. Imagine where you are and what you can see. Who would like to share what they imagine?

PAUSE after “And when I breathe... in the trees.” **ASK** children what Emma pretends as she breathes. **INVITE** them to take a few slow, deep breaths.

What is Emma doing? Yes, she is breathing. As she breathes, what does she pretend? Yes, she imagines that she is the wind moving the leaves in the trees.

Let’s take a few slow, deep breaths, too. Breathe in... and out...

After

SUMMARIZE when children may practice mindfulness.

Emma and Henry practice “Sit, Bow, Breathe.” There are many ways to be mindful. You can practice mindfulness when you feel upset, or too busy, or just to rest your body and mind.

GUIDE children to do “Sit, Bow, Breathe.” **ADD** the card to your “Mindful Moment” basket.

Let’s practice the Mindful Moment “Sit, Bow, Breathe” [show card].

Sit comfortably. Quietly observe with your senses... Connect your hands and gently bow your head. What do you imagine? Now rest your hands. Close your eyes. Notice your breath coming in... and out...

Please open your eyes. How do you feel?

Build Interest

CONNECT to Day 18: Small Group. DISTRIBUTE the science journals where children recorded tally marks. **INVITE** children to share.

We filled containers with sand. Here is the page you used to record how many scoops you used to fill the containers. Who would like to share?

INVITE children to carefully explore the tub of pebbles with the cups.

Today, we are going to do some more counting and filling. This time, we will use pebbles [show]! Take a few minutes to explore scooping and pouring out the pebbles in this tub.

Build Understanding

SHOW one empty container. **INVITE** children to brainstorm how to find out how many scoops of pebbles it takes to fill the container.

Here is a container [point]. I wonder how many scoops of pebbles it will take to fill the container. How can we find out?

Ok, you said [summarize].

- How would you know the container is full?
- How can we make sure we are measuring fairly and that each scoop has the same amount of pebbles in it?
- How could we keep track of how many scoops of pebbles it takes to fill the container?
- We used [number] of scoops to fill this container with sand. Do you think we will use more or less scoops of pebbles to fill the container?

WORK together with children on filling the container and tracking the number of scoops. **REFLECT** on what they are noticing and learning.

Build Experience

GIVE each partnership one tub of pebbles, a scooper, another empty container, their science journal, and a pencil. **ASK** them to scoop pebbles into the container and add tally marks in their science journal.

We just worked together to fill this container with pebbles. We learned it took [number] scoops of pebbles to fill it. Now, you can work with a partner to fill a different container and keep track of how many scoops of pebbles it takes.

- Do you think it will take more scoops of pebbles or less scoops to fill this new container? Why?
- How will you and your partner share the work? Will you take turns scooping the pebbles? Will one person record the tally marks?

Remember to measure fairly. Be sure to fill up each scoop all the way to the top each time.

SUMMARIZE the activity.

Today we scooped pebbles into containers. We kept track with tally marks. We compared. Let's discuss:

- How many scoops did it take to fill your container?
- Did any of the groups scoop different amounts? Why do you think that happened?
- Did we use more scoops of sand or pebbles to fill the containers?
- What did you learn?
- What questions do you have?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of “How Many Scoops of Pebbles?” to children’s science journals (one per child).

Additional Materials

- One container for the group
- Tubs of pebbles (one per partnership)
- Cups for scooping pebbles (one per partnership)
- Larger containers (one per partnership)
- Science journals
- Writing tools
- Unit Chart: “Tally Marks”



Build Background Knowledge

Practice making tally marks. Give children a handful of cubes to tally.



Stretch Their Thinking

Compare quantities of other items in the same sized containers. Invite children to predict, scoop, and keep track with tallies.

Listen/Look For

- How do children work in partnerships?
- How do children explain the difference in the number of scoops needed to fill the different sized containers?
- How do children explain the difference between how many scoops of pebbles and sand it takes to fill the containers?

Greeting Time

Children make up a poem about a mixture with a partner.

Literacy: Literate Attitudes and Behaviors

INVITE children to chant the “Lemonade Poem.” **REVIEW** other mixtures you chanted about.

We are experimenting with drink mixtures. Let’s chant and act out the “Lemonade Poem.”

Lemon juice is sour [squeeze a fist].

But sugar is so sweet [sprinkle with the other hand].

Mix them up with water [hold one hand like a cup and stir with the other].

Then sip your tasty treat [pinch a straw and then make a slurping sound].

We changed this poem to be about different mixture, such as chocolate milk, and also a wacky mixture!

ASK children to make up their own mixture poem with a partner. **INVITE** them to share.

Now you and a partner are going to make up your own mixture poem. It can be another drink mixture you know, a wacky or silly mixture, or maybe the most delicious mixture ever.

If you and your partner would like to share your poem, hold hands and lift them up together!

ENCOURAGE children in the “audience” to look and listen as their classmates perform.

How can we be good audience members? Yes, we can look [point to eyes] and listen [point to ears] as we enjoy each other’s performance!

Material

- Blueprint Songbook



Document It

If children make up their own versions of the chant, make sure to document it. Write down what they say and/or record them.

Developing Audience Skills

Encourage children in the “audience” to look and listen as their classmates perform. Ask them how else they can be good audience members. After ask the “audience” members to think about or discuss the performance. What did they like about it? How did they feel?

Movement Time

Children follow “if/then” codes that are not in a pattern.

Science: Engineering and Technology

SHOW a spoon and straw. **REVIEW** the “if/then” codes: if you see a spoon, then stir your hips. If you see a straw, then reach and stretch.

You pretended to use spoons and straws to mix and taste some of your mixtures. Now let’s use these tools to play our “If/Then” game. Who can remind us of our codes?

PROMPT children to face the same direction, so they can “read” the tools from left to right. **PLACE** four tools in a random order. **GUIDE** children to follow the codes.

Today I am going to put the codes together, but they won’t be in a pattern. Do you think you will be able to follow them? Let’s try it...

PLAY again, increasing the number of tools if children are ready.

INVITE individual children to arrange the codes and have the group follow them.

Make & Prepare

- Have at least six spoons and six straws to make random codes.

Interacting with Children

Children enjoy new challenges, especially when you say you are going to try to trick them. When you make an activity fun and playful, children usually respond positively!

Talk Time

Children discuss what they have learned about mixing.

Literacy: Listening and Speaking

DISCUSS what children have learned about mixing. **REFER** to artifacts that reflect children’s work and thinking in this unit. **USE** a few questions from the suggested examples below.

We have learned how to follow these special codes. We also have learned so much about mixing!

- What is mixing?
- What are some ways to mix ingredients or materials together?
- What mixtures have you made?
- How did you make bubbles? What else did you learn about bubbles?
- What happens when we mix colors? What colors have you made? How?
- What do certain colors remind you of? How do they make you feel?
- How did you make lemonade? What other drink mixtures can you make?
- What else did you learn about making mixtures?

It is fun to mix and make together. Let’s enjoy one of our lemonade mixtures together!

Make & Prepare

Have a lemonade mixture ready for children to taste.

Additional Materials

- Anchor Chart: “Power of 3”
- Unit Project: I Spy Mixtures
- Unit Chart: “Color Mixing”
- Class sensory bottles
- Photo of Scientist Ahmed
- Photo of Kandinsky and paintings
- Any additional charts and artifacts that reflect children’s learning in this unit.

Keep It Going

- Invite children to help make lemonade for visiting family members.



Before

CONNECT to learning and exploring through mixing. **FOCUS** on the *letter m*.

We've had so much fun discovering what happens when you mix things. What sound do you hear in the beginning of the word "mix?" What letter makes the /m/ sound? Yes, the *letter m*.

DESCRIBE the *letter m* form as you write the uppercase and lowercase letters in the left corner of your board. **INVITE** children to skywrite the letters. **Optionally, review the ASL sign.**

The *letter m* makes the /m/ sound. To write an uppercase *letter M*, I start at the top and drop down. Then I slide down, slide up, and drop down. Now you write it with your finger in the air. This is the lowercase *letter m*. I drop down, make a hill, and make another hill. Now you try it.

CONNECT to the upcoming unit on cooking. **FOCUS** on the *letter c*.

Sometimes when you mix things, you get to eat or drink them! But mixing isn't the only way we prepare food. We can also cook! When we cook, we add heat to the food. Do you cook with your family at home?

What sound do you hear in the beginning of the word "cook?" Both the *letter k* and the *letter c* make the /k/ sound. The word "cook" begins with the *letter c*.

DESCRIBE the *letter c* form as you write the letters in the right corner of your board. **INVITE** children to skywrite the letters. **Optionally, review the ASL sign. Then let children know to listen for the /m/ and /k/ sounds.**

We know so many letters and sounds! Listen for the /m/ and /k/ sounds in the message. I'm going to write the *letter m* and the *letter c*.

During

DRAW pictures for the words *mix* and *cook*. **DESCRIBE** what you are doing and thinking. **INVITE** children to contribute.

First I want to show the word "mix." Here is a bowl and a spoon that we have used to mix with. Next, I want show the word "cook." What could I draw?

Suggested Labels: "mix," "cook"

PAUSE to focus on phonological awareness (/m/ in the word "mix" and /k/ in the word "cook").

The *letter m* makes the sound /m/. I want to write a lowercase *letter m*. I drop down and make a hill. Then I make another hill. Now you try writing it with your finger in the air. I'll write the rest of the letters in the word "mix" now.

REPEAT with the lowercase *letter c* in "cook." **INVITE** children to reread the labels with you.

After

PLAY the game "Matching Sounds." **SHOW** a picture of an object. **ASK** children to identify its beginning sound and match it to one of the targeted sounds (/m/ or /k/). **ADD** the picture to the side of the board that shows the same letter.

Let's play the game "Matching Sounds." I will show you a picture. We will name what we see in the picture and think about the beginning sound. Does it start with the same sound as the word "mix" or the same sound as the word "cook?" Whisper your answer in the palm of your hand like this [demonstrate]. Then we'll add it to the board. Let's try one together.

Here's a picture. What is it? What sound does it begin with? Does it begin with the same sound as the word "mix?" Does it begin with the same sound as "cook?" Whisper your answer in the palm of your hand. Who wants to add it to the board?

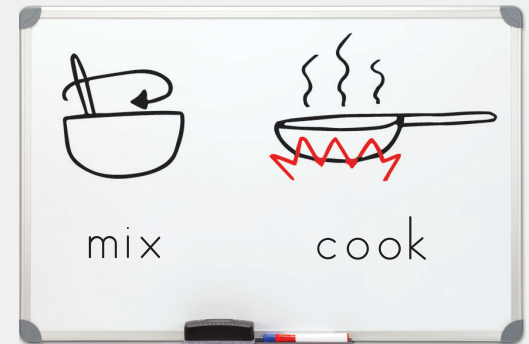
CONTINUE playing. Then **SUMMARIZE** the activity.

Today we sorted words by whether they began with the /m/ or the /k/ sound. We are learning so many sounds and letters!

REREAD the message one more time.

[Transition] **INVITE** children to tell you a word that begins with either /m/ or /k/.

Share another word you know that begins with either /m/ or /k/.



Make & Prepare

- Review the standard pronunciation for the *letter m* and the hard *letter c* on the *Blueprint* website.
- Familiarize yourself with the ASL signs for the *letter m* and the *letter c* on the *Blueprint* website.
- Download and print images of words that begin with /m/ (map, mouse, moon, mop) and /k/ but spelled with the letter c (cake, cat, carrot, cup).

Letter Formation

- Uppercase *letter M* — drop down, slide down, slide up, drop down
- Lowercase *letter m* — drop down, make a hill, make a hill
- Uppercase *letter C* — curve around
- Lowercase *letter c* — curve around



Keep It Going

- Gather children in a small group. Provide pictures with the beginning sounds /k/ (beginning with the letter c) or /m/. Together read through the pictures with children. Invite children to play memory with you. Place the pictures upside down. Invite children to turn over two pictures. Can they hear the beginning sound? Can they place all the objects that begin with /k/ together? Can they place all the objects that begin with /m/ together? If it is a match, they keep the pictures. If not, they place the pictures back over.
- Invite children to go on a "letter hunt" with you around the classroom. Provide each child with two index cards with the *letters m* and *c* written on them. Encourage children to walk around the room and look carefully for words that contain the *letters m* or *c*, or objects that begin with the *letters m* or *c*. If they find the *letters* or objects, invite them to draw a tally mark on their index card. How many *c*'s did they find? How many *m*'s did they find? What was an object that began with the beginning sound /m/ or /k/?

Make & Prepare

- Nine small dry-erase boards (or large sticky notes) and markers
- Review the ASL sign for “I like” on the *Blueprint* website.

Additional Materials

- Anchor Chart: “Readers Can Say”
- Anchor Chart: “Cheers”
- Unit Chart: “Tally Marks”
- All read-aloud books from Unit 6:
 - *Is That Wise, Pig?*
 - *The Mixed-Up Truck*
 - *Bubbles*
 - *How to Wash a Woolly Mammoth*
 - *Monsters Love Colors*
 - *White Rabbit’s Colors*
 - *Green*
 - *When Grandma Gives You a Lemon Tree*
 - *The Lemonade Hurricane*

Favorite Book

Each unit, your class will choose a favorite book. You can keep track of this by drawing a copy of the cover, or inviting a child to do so, and displaying it in the library center. Or, you can write the title on your daily calendar.

Assessment

Use the resources on the *Blueprint* website to gather and analyze information about children’s progress.

Before

Briefly REVISIT each read-aloud book from Unit 6. PLACE each one in a row.

We like to make mixtures! Let’s look at all the mixing books we have read together.

First, we questioned what the animals mixed in their soup when we read *Is that Wise, Pig?* In *The Mixed-Up Truck*, the truck mixed up different powders with water until he finally made the right mixture.

Next, we learned more about mixing and making bubbles. In *Bubbles*, Kangaroo and Koala become friends who like blowing and popping bubbles together. And in *How to Wash a Woolly Mammoth*, the girl teaches us, step by step, about one way she takes care of her pet.

Then we experimented with colors. The monsters in *Monsters Love Colors* scribbled with their crayons and created new colors. In *White Rabbit’s Colors*, Rabbit learned how to mix paints to make new colors, too. And in *Green*, we observed and described many different versions of one color.

Last, we made lemonade mixtures. The girl in *When Grandma Gives You a Lemon Tree* picked, squeezed, and mixed up the juice from her lemons to make lemonade. And in *The Lemonade Hurricane* we reminded ourselves how important it is to take time to be calm and still each day.

GIVE children time to reflect on which book is their favorite. ASK how we can find out which is the class’ favorite book. INVITE small groups to draw one tally mark on the board in front of their book.

Take a look at each of these books. Think about which one you enjoyed the most. How can we find out what our class’ favorite book was? Yes, we can vote! In a moment, each of you will have a turn to draw one tally mark on the board in front of your favorite book.

SHOW the Unit Chart: “Tally Marks.” REVIEW how to make tally marks. HIGHLIGHT that the fifth tally mark goes across the other four. (If a child adds the fifth tally, prompt them again.)

Who can remind us how to draw tally marks? How many lines go straight down? Four. And what do we do if we want to add a fifth tally mark? Yes, it goes across the other four lines. Let’s use tally marks to vote...

ASK children how we can find out which book the most readers chose. GUIDE them in counting the tally marks for each book and determining which one received the most votes. ACKNOWLEDGE that some children’s favorite book may not get the most votes. ASSURE them their favorite will be available in the library.

I wonder which of these books the most readers chose. How can we find out? Yes, let’s count the number of tally marks for each book. Then we will reread that book today! Please count along with me...

During

REREAD the book with the most votes.

PAUSE once to INVITE children to share what they like about the book. PROMPT them to use the sign and sentence stem, “I like...”

Readers, think about what you like in this book. If you would like to share what you like, please make the sign for “I like” [demonstrate]. You can start by saying, “I like...”

After

CLOSE by choosing a cheer.

We sure had fun reading about experimenting with mixtures. Let’s celebrate our learning by choosing a cheer!

Build Interest

CONNECT to previous scooping activities. **DISTRIBUTE** children’s science journals and invite them to browse the tally pages. **DISCUSS** discoveries so far.

We’ve been scooping and counting different items. Here are your science journals where you wrote down tally marks to keep track of the scoops of sand and pebbles. What have you discovered so far?

INVITE children to carefully explore the tub of water with the cups.

Today, we are going to use a very different material: water! Take a few minutes to explore scooping and pouring out [demonstrate] the water in this tub.

Build Understanding

SHOW one empty container. **INVITE** children to brainstorm how to find out how many scoops of water it takes to fill the container.

Here is a container [point]. I wonder how many scoops of water it will take to fill the container. How can we find out?

Ok, you said [summarize].

- How would you know the container is full?
- How can we make sure we are measuring fairly and that each scoop has the same amount of water in it?
- How could we keep track of how many scoops of water it takes to fill the container?
- We used [number] of scoops to fill this container with sand and [number] to fill it with pebbles. Do you think we will use more or less scoops of water to fill the container?

WORK together with children on filling the container and tracking the number of scoops. **REFLECT** on what they are noticing and learning.

Build Experience

GIVE each partnership one tub of water, a scooper, another empty container, their science journal, and a pencil. **ASK** them to scoop water into the container and add tally marks in their science journal.

We just worked together to fill this container with water. We learned it took [number] scoops of water to fill it.

Now you can work with a partner to fill a different container and keep track of how many scoops of water it takes.

- Do you think it will take more scoops of water or less scoops to fill this new container? Why?
- How will you and your partner share the work? Will you take turns scooping the water? Will one person record the tally marks?

Remember to measure fairly. Be sure to fill up each scoop all the way to the top each time.

SUMMARIZE the activity.

Today we scooped water into containers. We kept track with tally marks. We compared. Let’s discuss:

- How many scoops filled your containers?
- Did any of the groups scoop different amounts? Why do you think that happened?
- Look at your tally marks across all three measuring activities. What do you notice?
- What did you learn?
- What questions do you have?

DISTRIBUTE science journals. **INVITE** children to record their thinking.



Make & Prepare

- Download, print, and add a copy of “How Many Scoops of Water?” to children’s science journals (one per child).
- Cover the table with towels or a reusable tablecloth for easy clean up.

Materials

- One container for the group
- Tubs of water (one per partnership)
- Cups for scooping water (one per partnership)
- Larger containers (one per partnership)
- Science journals
- Writing tools
- Unit Chart: “Tally Marks”



Build Background Knowledge

Ask one child to write a group of tally marks. Have other children count to find out how many.



Stretch Their Thinking

Compare quantities of objects in different sized containers. Invite children to predict, scoop, and keep track with tallies.

Listen/Look For

- What do children say when they compare water to the other materials?
- What do children notice when they compare number of scoops of the different materials?



Supporting Multilingual Learners

For multilingual children, emphasize that they are also multilingual writers! Encourage them to convey messages in both English and their home language in their science journals.



APPENDIX

- 118 Continued Conversations
- 119 Coming Up in Unit 7: “Let's Eat”
- 120 Teaching Point Checklist
- 124 Family Letter – What’s Happening Now
- 125 Family Letter – Keep it Going... At Home
- 126 Family Letter – Songs, Poems and Chants
- 127 Family Letter – Yoga Poses

Digital Online Resources



<https://clibblueprint.org/resources-tx>

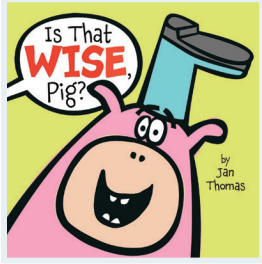
At the web address above, you will find the following resources and downloads.

- ASL Signs (images & videos)
- Family Resources
- Featured Class Books
- Letter and Numeral Formation Guide
- Letter Pronunciations (audio)
- Mindful Moments
- Science Journals
- Songs, Poems and Chants (audio & print)
- Teaching Point Checklist
- Unit 6 Images
- Weekly Materials List
- Yoga Poses (images & video)



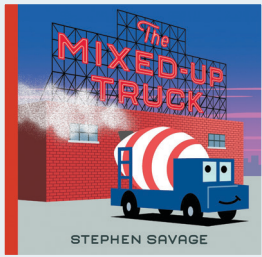
Continued Conversations

The books selected for this curriculum are used to promote certain skills and concepts based around specific thematic goals. However, each book is rich with other ideas and topics worth exploring and discussing. As children re-engage with books used during class read alouds, encourage other ways of thinking about them. Below are examples of ways to continue these conversations.



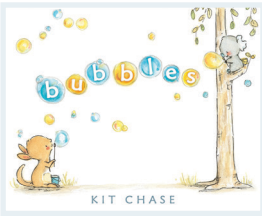
Is That Wise, Pig?

- Can you count each of Pig's ingredients? Can you write the number?
- Which ingredients are nourishing foods?
- What do you think happens after Mouse and Cow order pizza?



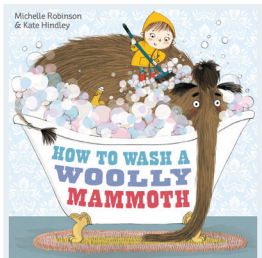
The Mixed-Up Truck

- Have you ever seen a cement truck in your community? What else do they build?
- What other community vehicles do you see? What wheels do you see?
- What time of day is it? How do you know?



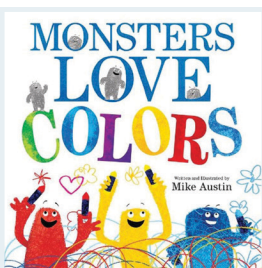
Bubbles

- How is Kangaroo being friendly?
- How do you make new friends? What advice would you give Kangaroo?
- What animals would you like to make with bubbles?



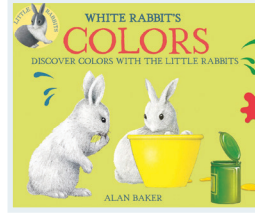
How to Wash a Woolly Mammoth

- How else could the girl get the woolly mammoth in the bathtub?
- Do you know the names of any other animals that are extinct? Why do you think some animals are extinct?
- If the girl had a pet hamster do you think giving it a bath would be harder or easier than giving the woolly mammoth a bath?



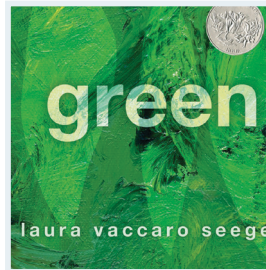
Monsters Love Colors

- How are the monsters being friendly with each other? How are they helpful?
- What color would you scribble? Why?
- Two monsters want to choose purple! What advice would you give them? How else could they solve the problem?



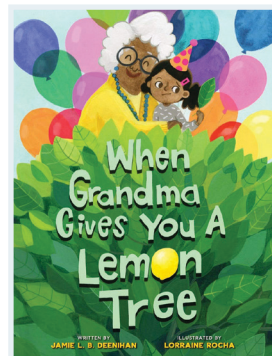
White Rabbit's Colors

- Have you seen a rabbit before? What color was it?
- Rabbit ran out of water at the end of the book. How else could he have solved this problem?
- How does the color purple make you feel? How does green make you feel?



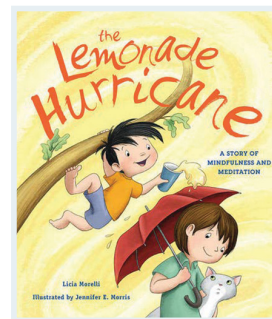
Green

- How is one green different than another green? How would you describe the difference?
- If you were going to make a book about a color, what book would you make? Why? What items would you include in your book?
- So many greens in the book come from nature. Why do you think that is?



When Grandma Gives You a Lemon Tree

- What is a present you've gotten that you liked? What was it for? Why did you like it?
- Why does the lemon tree make a good present?
- The girl made a garden with the money she made! What do you think happens next?



The Lemonade Hurricane

- Do you ever feel like Henry? What helps you calm down?
- What is your favorite thing to drink? What kind of hurricane would you be?
- Do you have siblings? How do you help each other?

Coming Up in Unit 7:

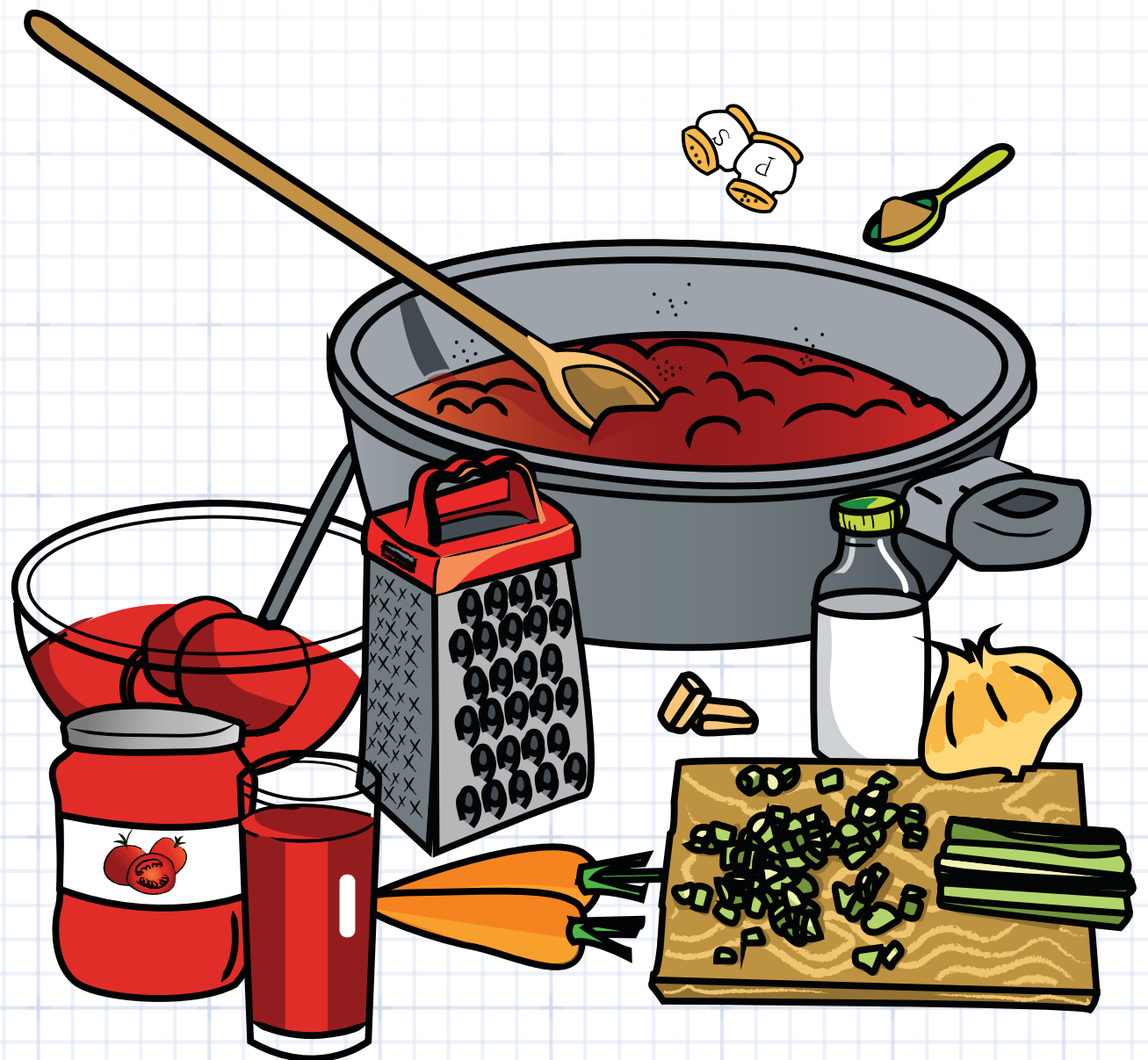
"Let's Eat!"

Children just acted as chemists in a lab, as they made mixtures using a variety of substances. They learned that mixtures result in changes, some that are reversible, and some that are not. They asked questions, made predictions, and used their senses to make observations.

In the next unit, children continue to act as chemists, but they turn their attention to kitchen chemistry as they work to figure out what makes food special. They explore common kitchen tools and investigate how the cooking process changes food. They also read two versions of a popular food folktale, *The Enormous Potato*, and learn how some foods grow from seeds.

In preparation for Unit 7, keep the mixing tools you used in this unit and collect:

- Large plastic bowls
- Pots
- Wooden spoons
- Other kitchen tools (yard sales and discount stores are a good place for these)
- Seed packets
- Containers to plant seeds (consider using recycled materials such as clean yogurt containers)
- Any supermarket-related materials for the next dramatic play center, the market (e.g. toy food, scale, shopping bags, baskets, empty & clean food containers)



Primary Standard	Teaching Point	Date	Observation notes
Approaches to Learning: Initiative and Curiosity	Children begin to notice mixing in their daily lives.		
	Children discuss what they know and wonder about bubbles.		
	Children solve a problem: how to replace a missing bubble band.		
Approaches to Learning: Persistence and Attentiveness	Children discuss how the character keeps trying.		
Social Emotional: Self-Awareness and Self-Concept	Children review ways to calm down when they feel upset.		
	Children learn to calm down by pretending to blow bubbles.		
	Children practice "Calm Color."		
	Children role-play to help a puppet calm down.		
	Children practice "Sit, Bow, Breathe."		
Social Emotional: Social Awareness and Relationships	Children discuss the characters' friendship.		
	Children discuss how the girl takes care of her pet.		
Social Emotional: Self-Regulation and Responsible Behavior	Children discuss how the character's behavior changes.		
Literacy: Literate Attitudes and Behaviors	Children learn a poem about making lemonade and do variations (use an excited expression, use another drink mixture, etc.).		
	Children vote for their favorite book from the unit.		
Literacy: Listening and Speaking	Children listen to the class book about mixing.		
	Children discuss what they have learned about mixing.		
Literacy: Phonological Awareness	Children learn about the <i>letters i, x, u, c, and o</i> .		
	Children recognize uppercase letters.		
	Children combine the onset and rime in words.		
	Children distinguish between words that begin with /m/ and /k/.		
	Children identify how many syllables are in a word.		
Literacy: Comprehension	Children tell if they think the pig is making wise choices.		

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Photocopy as needed.

Also available for download at cliblueprint.org/resources-tx.

Primary Standard	Teaching Point	Date	Observation notes
Literacy: Comprehension	Children act out making the mixtures the truck makes.		
	Children share what they wonder about the construction site.		
	Children make predictions.		
	Children make connections.		
	Children tell how the rabbit experiments with colors.		
	Children discuss how the character's feelings change.		
Literacy: Fluency	Children say the characters' words with expression.		
Literacy: Print Concepts	Children learn about speech bubbles.		
Literacy: Vocabulary	Children learn the word "wise."		
	Children learn the word "mysterious."		
	Children learn the word "dazzling."		
	Children learn the word "pinch."		
Literacy: Writing	Children begin work on a class book.		
Math: Geometry and Spatial Relations	Children play the game "Is This a Sphere?"		
Math: Measurement and Data	Children discuss the results of a survey.		
	Children compare the size of objects.		
	Children vote for which lemonade mixture to make first.		
	Children measure volume with a variety of materials (using sand, pebbles, and water).		
Math: Numbers and Number Sense	Children learn that tally marks can represent numbers.		
	Children vote for a book using tally marks.		
	Children count objects one through 10.		
	Children practice yoga poses using ordinal numbers.		
	Children participate in using tally marks to show 10 steps.		

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Primary Standard	Teaching Point	Date	Observation notes
Science: Scientific Inquiry and Practices	Children make a toy mixture.		
	Children learn about a scientist and science labs.		
	Children mix and unmix classroom toys.		
	Children mix classroom toys in water.		
	Children participate in making a sensory bottle.		
	Children use straws to blow bubbles.		
	Children make color predictions.		
	Children mix primary colors of paint.		
	Children mix and make darker shades of green.		
	Children mix and make lighter shades of green.		
	Children predict what will happen to a drink mixture that sits still.		
Science: Physical Sciences	Children investigate what happens when they mix salt and water.		
	Children investigate what happens when they mix sugar and water.		
	Children create a mixture with cornstarch and water.		
	Children mix soap and water to explore bubbles.		
	Children observe bubbles made from mixing baking soda and vinegar.		
	Children make a shaving cream mixture.		
	Children make a sand mixture.		
Science: Physical Sciences	Children make lemonade mixtures.		
Science: Engineering and Technology	Children explain why some tools are good for mixing.		
	Children follow "if/then" codes in different patterns.		

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Primary Standard	Teaching Point	Date	Observation notes
Physical Development: Gross Motor Skills	Children use different body parts to do mixing actions (stirring and swishing).		
	Children alternate shaking opposite hands and feet.		
	Children do different actions at the same time.		
	Children do a balancing exercise.		
Physical Development: Concepts of Health	Children breathe as if blowing bubbles.		
Creative Arts: Music	Children sing about different mixing actions (stirring, swishing, and shaking).		
	Children learn a colors song.		
	Children hold up a color card when they sing about the color.		
Creative Arts: Creative Movement and Dance	Children pretend to make a mixture as they sing.		
	Children pretend to float like bubbles.		
	Children float like bubbles to instrumental music with variations (greet a partner, dance with a partner, etc.).		
	Children practice yoga poses (kangaroo, koala, woolly mammoth, and rainbow).		
	Children pretend to paint on the ceiling with their feet.		
	Children pretend to paint a rainbow.		
	Children act out mixing colors with and without a partner.		
	Children move in different ways to "The Color Song" ("scribble," hop, twirl).		
Creative Arts: Visual Arts	Children create bubble paintings.		
	Children compare different shades of yellow.		
	Children "scribble" and name different colors.		
	Children discuss the names of different greens.		
	Children describe and compare different kinds of green.		
Creative Arts: Dramatic and Performance Art	Children launch the science lab dramatic play center.		
Creative Arts: Art Appreciation and Attitudes	Children observe and discuss a painting by Wassily Kandinsky.		
	Children discuss what different colors make them think or feel.		

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What's Happening Now

Dear Families,

Science takes center stage as we learn more about mixing! Children mix together a variety of substances such as salt and water, soap and water, and shaving cream and paint, and they use their senses to observe and notice changes.

During this unit, children also:

- Look for examples of mixing in their daily life
- Practice the *letters x, u, i, and c*
- Learn about tally marks
- Do a taste test comparing various mixtures of lemonade



Keep It Going

Share Learning

Sensory bottles are no spill containers that contain interesting mixtures inside. Children can shake them and observe what happens. Use a clear container that has a cap. Fill it with some liquid (water, cooking oil, corn syrup, shampoo, etc.) and add some solid material (beads, pebbles, pine needles, googly eyes, etc.). Cap it (make sure to hot glue or tape it closed) and then shake. Observe what happens. These types of sensory bottles are both interesting and often soothing for children. Send it, or a picture of it, to school, so your child can share.

Share Your Expertise

Have you ever worked in a science lab or know someone who does? Does your job involve mixing? At the construction site? As a painter? In the kitchen? If so, let us know, so we can learn more about mixing from you!

Share Some Supplies

Our classroom is in need of the following items. We hope you are able to share:

- Clear plastic cups
- Food items to mix with water (such as salt, sugar, and cornstarch)
- Food coloring
- Bubbles
- Shaving cream
- For our new dramatic play center (Science Lab), various containers such as bowls and cups, various mixing tools such as spoons, tongs, measuring tape, lab coats or large white shirts, and safety glasses.

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This is a unit letter you can send home to families.

Available for download at cliblueprint.org/resources-tx or photocopy as needed.

Keep It Going... At Home

Dear Families,

Here are some things that you can do at home to support what your child is learning in school.

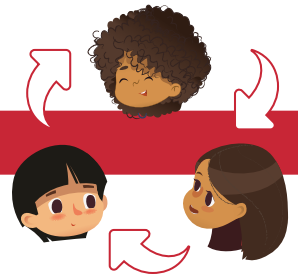
Keep Them Healthy & Active

Blow bubbles and invite your children to chase and pop them. Bubbles are special because you can't know which way they will go. Children have to jump, reach, and switch directions mid-stream to catch them.



Develop Their Emotional Well-Being

Self-regulation, the ability to calm down, is an important part of growing up. We teach children several new strategies for learning how to do this, including finding their "calm color," the color that brings them peace. Talk about your calm colors at home. Practice closing your eyes and thinking of your calm color and imagine it flowing through your body.



Help Them Communicate

Making predictions is an important skill for children to practice. When reading, ask your child, "What do you predict will happen next? Why?" This helps them engage in active reading.



Explore Their World

We are studying mixing, in part, because it provides children with a great opportunity to use their senses to describe what they see, feel, and hear. It also helps them notice how some things change when they're mixed together and some don't. Play "I Spy" at home and identify all the mixing that takes place in a day. Is the laundry getting mixed together? Is the soup? What can be separated after mixing and what can't?



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Songs, Poems and Chants

“The Mixing Song”

[Sing to the tune of “Row, Row, Row Your Boat.”]

Stir, stir, stir it up
All the way through!
We are all scientists,
I wonder what we'll do!

“The Color Song”

[Sing to the tune of “Twinkle Twinkle Little Star.”]

Blue and yellow
And red too,
Mix them up for something new.
Orange, purple, brown and green,
Every color that you see,
Blue and yellow
And red too,
Mix them up for something new.

“I’m A Little Bubble”

[Sing to the tune of “Take Me Out to the Ballgame.”]

I’m a little bubble, shiny and round.
The wind lifts me up and then I drop.
Down to the ground is where I pop!
I’m a little bubble, shiny and round.
I gently float down to the ground.

“Lemonade”

Lemon juice is sour [squeeze a fist]
But sugar is so sweet [sprinkle with the other hand]
Mix them up with water [hold one hand like a cup and stir with the other]
Then sip your tasty treat! [pinch a straw and then make a slurping sound]



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Yoga Poses

Kangaroo Pose

1. Stand up.
2. Bend your knees and lower your hips.
3. Pull your elbows back to bring your wrists beside your ribs.
4. Jump in place: boing!



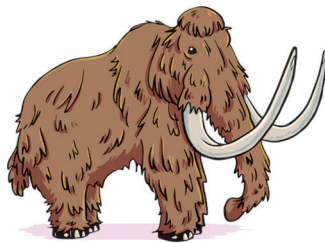
Koala Pose

1. Stand up.
2. Wrap both arms around your chest and hold onto your shoulders.
3. With bent knees, cross one leg over the other.
4. Try to balance. Imagine hugging a tree trunk.
5. Repeat with the other leg.



Woolly Mammoth Pose

1. Stand and step your feet out wide.
2. Connect your hands to make your trunk.
3. Lean forward and swing your trunk from side to side.
4. Stomp your feet.
5. Pretend to sip water and spray it out of your trunk.



Rainbow Pose

1. Start on your hands and knees.
2. Straighten one leg behind you and bring your foot flat on the floor.
3. Turn your body to the side.
4. Reach your arm up and overhead. Try the other side.
5. Stretch into an arch.



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In loving memory of Lidia Lemus. Her dedication to children, equity and kindness live throughout these pages. Thank you for working to make these values come alive with the children in your care.

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