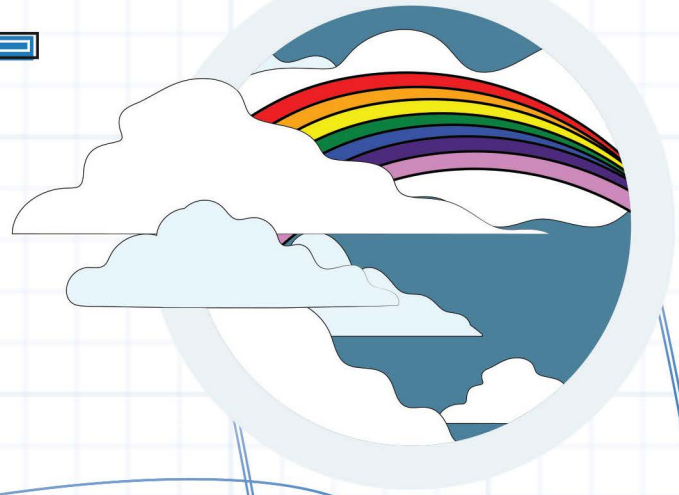
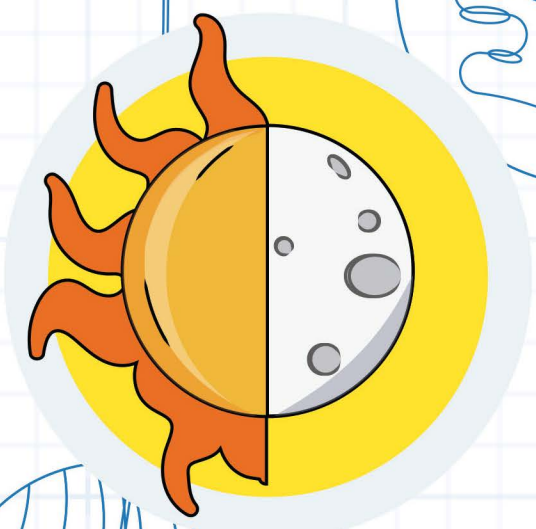
BLUEPRINT

Look Up!

Teaching Guide 9





Published by:

CLI - Children's Literacy Initiative
990 Spring Garden Street, Suite 400
Philadelphia, PA 19123

Email: blueprint@cli.org
Visit: www.cliblueprint.org or www.cli.org

Credits:

Content Development: Michele Coulombe (Lead), Amy Fatall, Erin Zuccaro

Content Contributors: Jacky Howell, Kate Lafferty, Alissa Lange, Lidia Lemus, Glennis Lizardo, Katherine Mach, Julie Marzano, Emily McCarthy

Pilot and Advisory Organizations: Augusta County Public Schools of Virginia, Elizabeth Public Schools of New Jersey, Newark Public Schools of New Jersey, Belmont Academy of Philadelphia, PA, Academy of Natural Sciences of Drexel University, East Tennessee State University at Johnson City, TN.

Design, layout, Illustrations: Justin Hudson, Michael Jones, Zakiyyah Smack, Priscilla Williams, Kelly Phillips

Publishing Editor: Brenda Leger

Children's Literacy Initiative
Blueprint for Early Learning: A Comprehensive Pre-K Curriculum

ISBN 978-1-7345672-0-5

LCCN 2020936168

FIRST EDITION First printing April 2020

10 9 8 7 6 5 4 3 2 1 CRW 20 21 22 23 24 25

Printed and bound in the United States of America

BLUEPRINT

For Early Learning

Michele Coulombe, Amy Fatall, Erin Zuccaro

Children's Literacy Initiative – Philadelphia, PA

BLUEPRINT


8 9 10


mars
avril
mai
juin
juillet
août
septembre
octobre
novembre
décembre

Look Up!

About Unit 9

Centers

Books In This Unit

Week at a Glance & Lessons

Appendix

Digital Online Resources

https://cliblueprint.org/resources-tx

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

- ASL Signs (images & videos)
- Board Games
- Family Resources
- Featured Class Books
- Letter and Numeral Formation Guide
- Mindful Moments
- Science Journals
- Songs, Poems, and Chants (audio & print)
- Teaching Point Checklist
- Unit 9 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

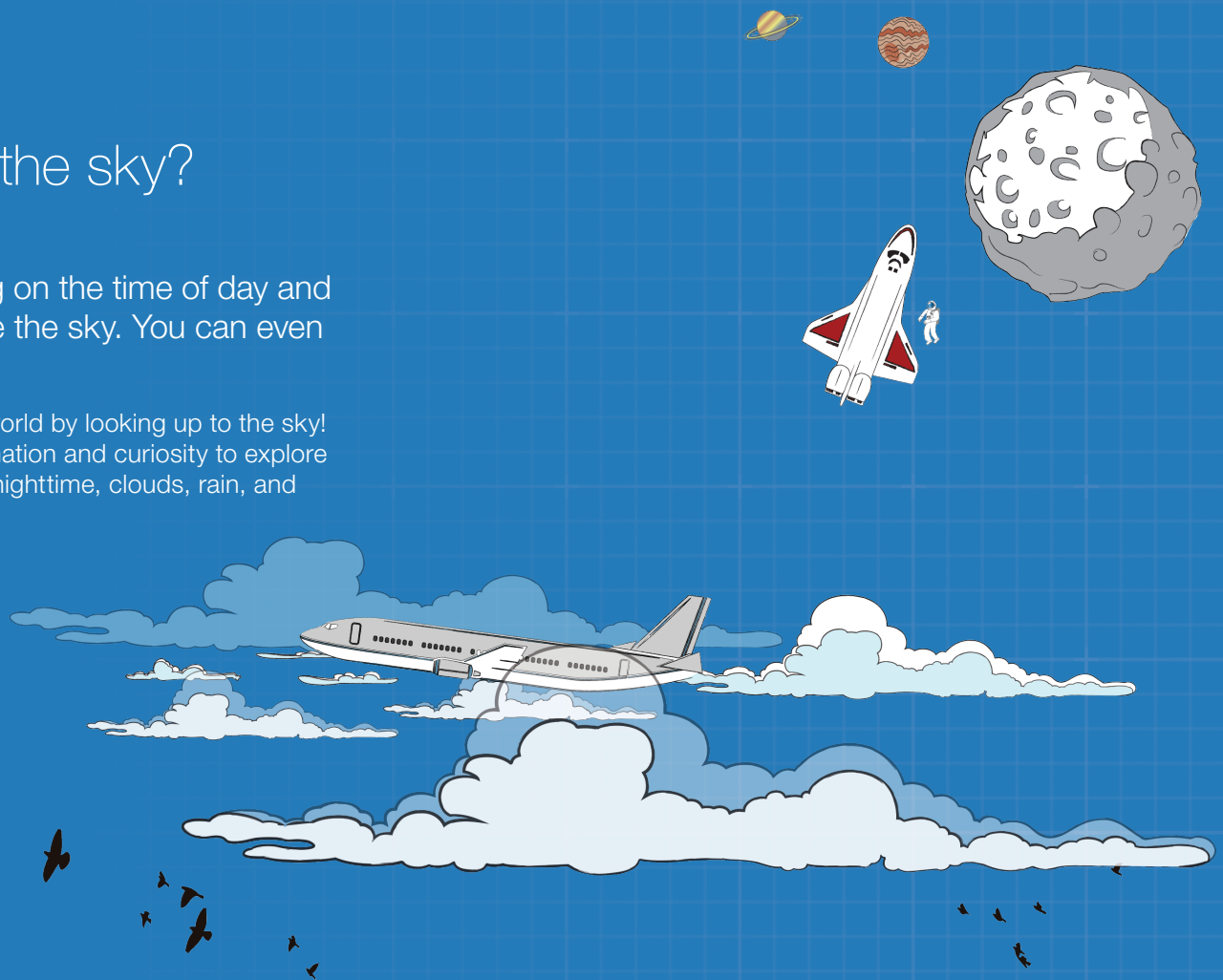
Look Up!

What happens in the sky?

What Children Learn

The sky changes depending on the time of day and the weather. People observe the sky. You can even travel in the sky!

Children continue to explore their world by looking up to the sky! Encourage them to use their imagination and curiosity to explore concepts like gravity, daytime and nighttime, clouds, rain, and space travel.



Week	Guiding Question	What Children Learn	Be Sure To…
1	Why do we observe the sky?	We observe the sky to notice how it changes and to check the weather.	• Talk about what children see in the sky. • Observe and explore how the sky changes. • Discuss how the weather impacts decisions people make, such as what to wear and what to do. • Give children opportunities to add objects together.
2	What is special about clouds and rain?	Clouds come in all different colors, sizes, and shapes. Clouds are made of water. When they get full, rain falls down. Living things need water to survive.	• Support children's observation skills by describing and comparing different clouds. • Help children realize how important rain is for taking care of plants and animals. • Begin a class book on what children know about the sky or a part of the sky.
3	How are daytime and nighttime the same and different?	In the day, the sun gives us light and heat. Lots of people and animals are awake and busy. At night, the moon is out. It is cooler and darker. Lots of living things sleep during the nighttime but not all of them!	• Talk about ways daytime and nighttime are the same and different. • Have children explore shadows and make shadow puppets. • Introduce the idea that some animals are awake at night. • Compare uppercase and lowercase letters.
4	What is it like to be an astronaut?	Astronauts work hard together to complete their missions to outer space.	• Talk about what astronauts do, what they wear, and what it might feel like to travel in outer space. • Play games with children that reinforce following directions. • Discuss how to respond with empathy in common classroom situations.

Unit at a Glance

Week 1
Why do we observe the sky?

Children begin the unit by thinking about what we (and scientists) can learn by observing the sky. During Gathering Times, children discuss and learn yoga poses for things they may see in the sky. In Small Group, children combine sets of "clouds" and "stars" to develop foundational skills related to addition. They also create their own rain sticks.

Week 2
What is special about clouds and rain?

Children turn their attention to clouds, rain, and water. They learn vocabulary for describing different types of clouds and explore how rain affects living things and the environment. They use rain sticks and make the sounds of rain storm with their bodies. They also do multiple hands-on investigations with water to better understand its properties.

Week 3
How are daytime and nighttime the same and different?

Children continue learning about the sky. They move above the clouds and learn more about the sun and moon. They compare daytime and nighttime and begin to see it as a cycle. They learn that people all over the world see the same sun and moon. While many people do the same things during the daytime and nighttime (go to school, do chores, etc.), they learn that some animals are nocturnal.

Week 4
What is it like to be an astronaut?

Children conclude their investigation of the sky by learning about space travel. They discover what astronauts do, the equipment they wear and use, and what they can teach us about the Power of 3. They explore how things move differently in space, and they practice moving like astronauts. In small groups, they participate in an outer space coding grid game.

Connections to Other Units

Natural world

We have explored animal and plant life in many units in the curriculum (Unit 3, Unit 5, Unit 7, and Unit 8). In this unit, we explore more about the natural world by dipping into astronomy and meteorology. Learning about earth and space science helps round out children's understanding of the natural world and how it impacts their daily lives. This unit echoes back to Unit 2 in terms of helping children compare daytime and nighttime activities and Unit 5 when children explored farm animals' sleeping arrangements.

Coding

In this unit, children learn how to follow direction cards, move around an obstacle, and follow the directions on activity cards. They have practiced using codes in movement (if/then codes) and in Unit 5: "Life on the Farm" when they played farm animal games.

Jobs

In this unit, we look at the job of the astronaut with a focus on the hard work and teamwork astronauts need to succeed. We also find out about how meteorologists observe and track the weather. We have looked at many occupations throughout the curriculum: in Unit 2: "Healthy Kids," we explored doctors; in Unit 3: "Exploring Our Local Community" we looked at community helpers; in Unit 5: "Life on the Farm," we learned about what farmers do; and, in Unit 6: "Mix & Make," we worked like scientists in a lab.

Class Book
We Know the Sky

Create at least one class book during each unit to which children can 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 toward 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!).

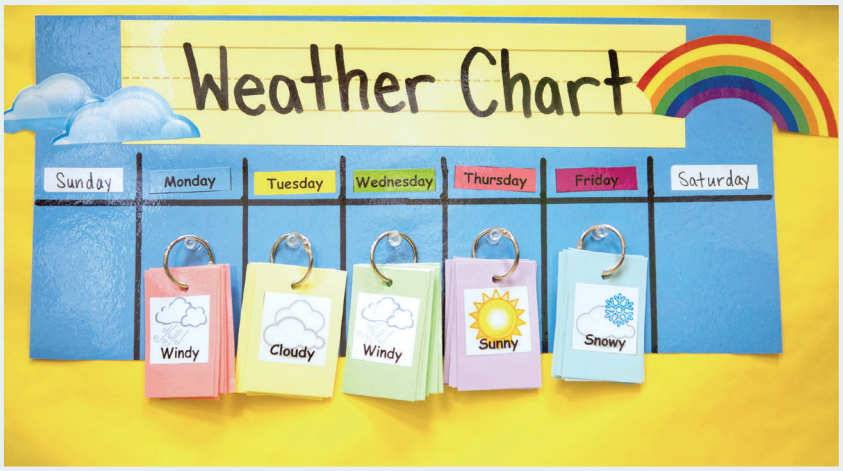
In this unit, children learn about what is in the sky and how the sky changes. They are encouraged to observe the sky and name objects found in it. They contribute to a class book by writing about something they know about the sky. This book will be presented to families during Week 4.

Unit Project: Weather Data

As children explore what happens in the sky, they learn that the sky changes as does the weather. To give them an authentic experience related to this idea, give children an opportunity to practice data collection and analysis.

Data collection and analysis is one useful way to teach children to answer the questions they have and is commonly used in meteorology. Data collection has a myriad of benefits for children: it helps develop their math skills as they track and record their data and look for patterns in the records; it helps build their science skills as they observe nature and take note of changes and cycles; and it also builds community as children work together.

We offer an example of a guiding question ("What is the weather in our local community at this time of the year?"), but as always questions that are pertinent to children, and asked by them, will be the most motivating. Create a chart or a grid where children can collect weather-related data. Collaborate with children on deciding when to record what they notice (in the morning, after nap time), how to record what they notice, and who will record it.



Invite children to write weather reports at the writing center or the weather station dramatic play center. Can they record each other giving these weather reports? Can they share their weather reports with other classrooms, the school, or their families?

Connect your overall question to how real meteorologists collect data and, more importantly, how meteorologists use their data. For example, the data are used to help people understand trends and patterns in the weather, so they can make informed choices in everything from planning daily activities to planning special events.

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	meteorologist	a person who observes the sky and talks about the weather
	blend	to mix or blur together
	masterpiece	a great work of art
	background	what is behind the objects in a picture or scene
	wispy	light and floaty
2	breeze	gentle wind
	gust	strong wind
	gushed	flowed or poured out quickly
	gravity	it pulls things toward the ground
	cracked	showing lines from splitting without coming apart
	bustling	busy and moving
3	orb	sphere
4	horizon	the line where the sky seems to meet the earth
	launch	to take off; start a big move
	mission	an important trip

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	sky
2	cloud
	rain
	water
	fall
3	day
	night
	sun
	moon
4	space
	planet (review)
	travel

Spotlight on Social Emotional Learning

Young children are beginning to develop their ability to identify and label feelings. But when children are upset, they may not be able to articulate their feelings with words and instead may show their feelings of anger, sadness, or frustration in other ways. In these moments, you can model empathy by noticing the child's behavior and helping them to identify the emotion they're experiencing.

One important way children learn empathy, or the ability to understand another person's feelings, is through experiencing relationships where their feelings are validated by others. You can then try to understand the child's perspective about the situation and to reflect that in a way that validates the child's feeling. Your reflection and validation of the child's perspective provides a mirror for the child to understand their own experience which builds self-awareness. Self-awareness is the foundation of empathy.

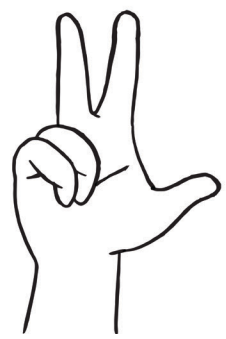
Your empathetic response to children promotes a deep sense of connection and creates a strong culture of caring in the classroom. The Power of 3 can help you clarify and reinforce children's responsibility in practicing caring behaviors with each other.

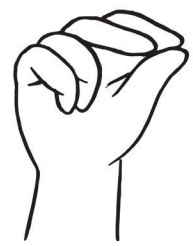
In this unit, lessons will reinforce the idea that one aspect of caring is thinking about how others are feeling. Children will be invited to look at illustrations and identify how they think the characters feel and discuss why they are feeling that way. This will give children more practice with identifying feelings based on facial expressions as well imagining how one might feel in a variety of situations.

American Sign Language

Yes

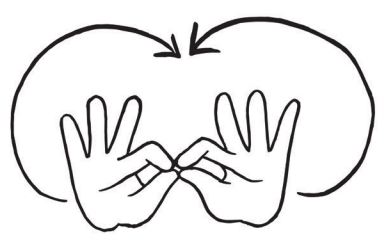
No





I Like

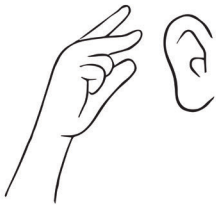
Power of 3

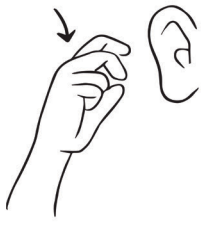


I Predict

I Learned

I Hear

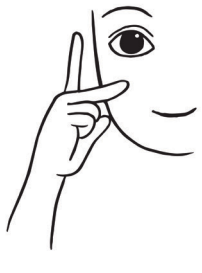




I Remember

I Wonder

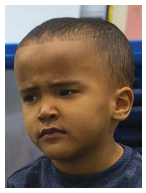
I See



CHARTS

Feelings

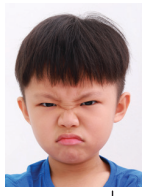

happy
feliz


grumpy
gruñón,
gruñona


sad
triste


proud
orgulloso,
orgullosa


silly
loquito,
loquita


upset
molesto,
molesta


calm
calmado,
calmada


glad
alegre


kind
amable


confident
seguro
segura


delighted
encantado
encantada


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

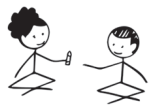
I learned

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. 	Play together. 	Put things away. 
Say, "I can do it!" 	Be helpful. 	Handle books and toys carefully. 
Calm down. 	Act kindly. 	Throw away trash. 
Keep on trying. 	Think about how others feel. 	Treat living things carefully. 

Anchor Charts

In Units 1 through 5, children participated in creating several anchor charts. In Units 6 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** Move safely. Say, "I can do it!" Calm down. Keep on trying. **Take Care of Each Other** Play together. Be helpful. Act kindly. Think about how others feel. **Take Care of Our Environment** Put things away. Handle books and toys carefully. Throw away trash. Treat living things carefully.	happy ◊ sad proud silly grumpy upset calm glad ◊ kind confident delighted ◊ caring ◊We often use the words glad and delighted as synonyms for happy when teaching children to describe their feelings	I like I predict I remember I learned I see I wonder	Round of Applause Kiss Your Brain Hip Hip Hooray Catch a Star Stir It Up Roller Coaster The Robot Happy Horse	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.

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"
- "What Happens in the Sky?"

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.

Art

Week 2 | Cloud Painting

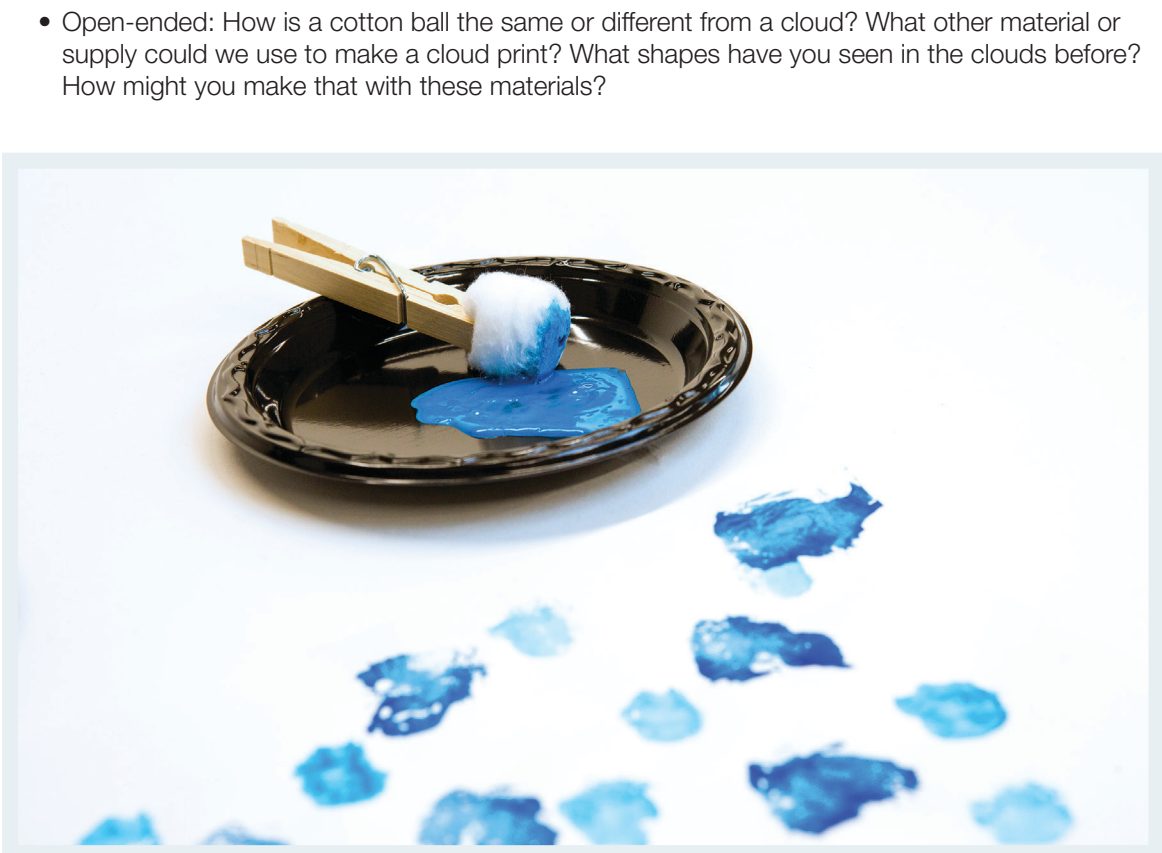
Children create sky-like paintings using cotton balls.

Creative Arts: Visual Arts

Materials	Directions
Cotton balls, clothespins, blue paint (variety of shades if possible), white construction paper, plate or tray for paint OR blue construction paper (variety of shades) and white paint	Hold a cotton ball with a clothespin and dip into paint like a stamp. Dot or stamp paint onto construction paper to make cloud prints.

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

- Gesture: Point to the color paper you want to use. Point to the color paint you want to use.
- Yes/No: Do your cloud stamps look like real clouds to you? Do you want to add more clouds to your painting?
- Either/Or: Do you think your sky has enough clouds, or do you want to add more? Does your cloud look like a circle or another shape?
- Open-ended: How is a cotton ball the same or different from a cloud? What other material or supply could we use to make a cloud print? What shapes have you seen in the clouds before? How might you make that with these materials?



Week 3 | Make Your Own Constellation

Children create their own constellations.

Creative Arts: Visual Arts

Materials	Directions
Black construction paper, white or yellow paint, cotton swabs, pictures of constellations	Download and print from the *Blueprint* website examples of constellations that are shaped like animals or people for reference. Invite children to use cotton swabs to paint and connect the dots of their own constellation.

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

- Gesture: Show me how you make a star with the cotton swab. Show me which constellation is inspiring you.
- Yes/No: Have you ever noticed a constellation in the sky? Are you making a constellation of a [person, animal, etc.]?
- Either/Or: Are you making a constellation of a [person, animal, etc.] or a [person, animal, etc.]?
- Open-ended: Have you ever seen a constellation in the night sky? What did it look like? What do you want your constellation painting to look like?

Blocks

Week 3 | Build a Spaceship

Children build their own spaceships using materials at the block center.

Math: Geometry and Spatial Reasoning

Materials	Directions
Paper towel tubes, aluminum foil, other recycled materials, images of spaceships	Download and print images of spaceships from the *Blueprint* website. Display them for children to use as reference. Invite children to build their own spaceships using blocks.

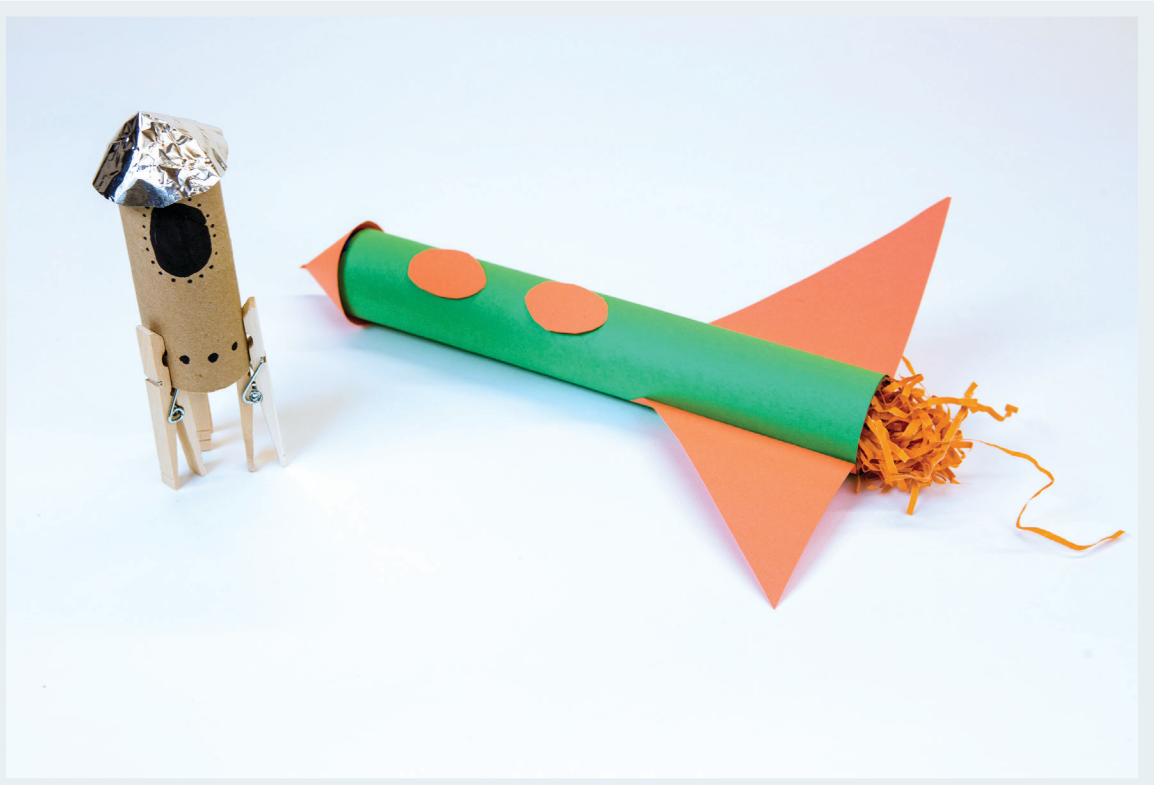
Use what you know about each child's language skills to start conversations:

- Gesture: Show me what materials you want to use today. Show me the paper towel tube. Show me the aluminum foil.
- Yes/No: Do you want to use [material] to build your spaceship?
- Either/Or: Do you want to use [material] or [material] to build your spaceship? Is your spaceship going to the moon or another planet?
- Open-ended: What materials do you want to use to make your spaceship? Why? What other materials could you use from home to make a spaceship? Why do you think a spaceship needs (fins, nose cone, etc.)? Where would you go if you could fly in a spaceship? Why?

Tip

Supporting Play

Elevate children's oral language by jumping into pretend play. First, "talk the talk" by adopting the language they are using. Restate what they said or did ("Wow! You had your spaceship go up, up, up!"). Then "talk it up" in order to elevate the talk and encourage more robust language use ("Your spaceship launched high into the atmosphere!"). Model mature phrasing, introduce vocabulary, and share theme based content as you play.



Dramatic Play

Week 1 | Weather Station

Children engage in dramatic play to explore a weather station.

Creative Arts: Dramatic and Performance Art

Materials	Directions
Setting props (maps, old or toy video camera, keyboards, old computer monitor, forecast/weather information posters, old or toy microphones, pointers, bottle caps, dials, etc.), newscaster/weather forecaster clothing (winter coats, raincoats, hats, scarves, blazers, ties, dresses, etc.), weather tools (thermometers, barometers, pinwheels, fans, etc.) Involve families by requesting examples of relevant props they may have available.	Set up the dramatic play center as a weather station. You can use old keyboards and computer monitors to create radar reports and a "dashboard." Create buttons and dials for radar using bottle caps, buttons, and other extra materials. Hang up maps and weather information, and place an old or toy camera on a tripod. Explore the site with children and discuss things that you might wear and use there. Build the center according to your children's interests and with their help. Be sure to ask families for donations, and get creative!

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

- Gesture: Show me the [camera, microphone, computer monitor, etc.].
- Yes/No: Is this the [thermometer, map, etc.]? Would you want to report the weather on television?
- Either/Or: Is this the [thermometer, map, etc.] or the [thermometer, map, etc.]? Would you report the weather from a television station or from outside?
- Open-ended: What could we use to check the weather? Why do you think we need tools to learn about the weather? What do you want to share about the weather?

Library

Week 1 | Sky Book Basket

Children read from a collection of books about the sky.

Literacy: Literate Attitudes and Behaviors

Materials	Directions
Books	Gather classroom books about the sky, rain, clouds, stars, and space. Place them in a clearly labeled basket at the library center. Invite children to read from the collection.

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

- Gesture: Show me the book you want to read. Show me a book about [sky, rain, stars, space, etc.].
- Yes/No: Do you want to read a book about [sky, rain, stars, space, etc.]? Would this book help us learn about [subject]?
- Either/Or: Do you want to read a book about [sky, rain, stars, space, etc.] or [sky, rain, stars, space, etc.]? Which of these two books would help us learn about [subject]?
- Open-ended: What do you think this book will be about? Have you read any other books about [sky, rain, stars, space, etc.]? If so, what was it? What other things in the sky could we find books about?

Math and Table Toys

Week 3 | Space Numbers

Children match numerals to corresponding dots.

Math: Numbers and Number Sense

Materials	Directions
Construction paper, markers	Cut out five "planets" in the shape of circles. Write numerals your children need practice with (e.g. 2, 5, 8, 9, 10) on each of them. Make crescent moons for each planet. Label them with the corresponding number of dots. Invite children to match each planet to its moon.

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

- Gesture: Show me [number]. Show me the moon with [number] dots.
- Yes/No: Does this moon show [number] dots? Is this [number]?
- Either/Or: Does this moon show [number] dots or does this moon show [number] dots? Does this moon match your planet or does this moon?
- Open-ended: What numeral is on that planet? How many dots are on the moon? How do you know? How do you know these all match?

Week 4 | Dice Building

Children work together to roll dice and add blocks to a structure.

Math: Operations and Algebraic Thinking

Materials	Directions
Small blocks, tape measure, string, rulers, dice with numbers one through three	Invite children to work in pairs or small groups to build a tall spaceship. They can roll the dice and add that many blocks to their spaceship. The next person will roll the dice and add that number of blocks to the spaceship. Can they build a spaceship as tall as their knee? Their hips? Their shoulders? What's the tallest spaceship they can build?

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

- Gesture: Show me [number]. Show me [number] blocks.
- Yes/No: Did you roll [number]? Can you count [number] blocks?
- Either/Or: Did you roll [number] or [number]? Do you want to add your blocks to the building here or here?
- Open-ended: What kind of building should we create? What number did you roll? How do you know? Where will you add your blocks to our structure?

Science

Week 1 | Sky and Ground Sort

Children sort pictures based on whether they are found in the sky or on the ground.

Science: Earth and Space Sciences

Materials	Directions
Two hula hoops, pictures of things found in the sky and on (or under) the ground	Download and print from the *Blueprint* website objects that children might see in the sky and other natural objects. Create a sorting map. For example, use a piece of construction paper divided into two sections. Invite children to sort the pictures.

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

- Gesture: Show me something found in the sky. Show me something found on the ground.
- Yes/No: Does this belong in the sky? Does this belong on the ground? Do you think a [object] could ever be in the sky? Do you think a [object] could ever be on the ground?
- Either/Or: Does this belong in the sky or on the ground?
- Open-ended: How are you sorting these cards? Can you think of another way to sort them? What other pictures could you add to each group?

Tip

Let Children Tinker

Allowing children to explore, take apart, and put together objects provides them with invaluable learning experiences. By tinkering with objects and their components, children develop problem solving and fine motor skills, engage in experiential and tactile learning, and utilize their senses of curiosity and imagination.

Week 3 | Fix a Flashlight

Children investigate the parts of a flashlight.

Science: Engineering and Technology

Materials	Directions
Flashlight	Take the flashlight apart so that the cover, body, and batteries are on the table or in a bin. Let children figure out how to put it back together so it works!

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

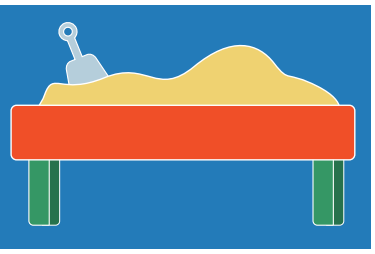
- Gesture: Show me the [cover, batteries, etc.].
- Yes/No: Have you ever assembled or put together an object? Have you ever used a flashlight? Does this piece fit with this one?
- Either/Or: Do you want to connect this piece to [this piece] or [this piece]?
- Open-ended: How do you know those pieces go together? How do you know if you are putting the flashlight together correctly? Is there more than one way to put the flashlight together? Why or why not?

Tip

Growing STEM Skills

"I wonder what we can do with these?" "What else can we do with these?" These are some of the most powerful questions you can pose to children. Offer children common classroom materials and/or upcycled materials, time, and an open-ended question, and watch them engage in inquiry, science, and math.

Sensory Table



Week 2 | Rainfall

Children use various materials to create rain.

Science: Engineering and Technology

Materials	Directions
Salt and pepper shakers, colanders/ strainers, cheesecloth, watering cans, plastic bottles with holes in the cap, etc.	Collect materials that can hold water. Cut out holes of various sizes if they do not already have pre-existing ones. Invite children to use these materials to create "rain." Encourage them to compare how quickly the "rain" falls from them and/or the size of the raindrops.

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

- Gesture: Show me the [salt shaker, strainer, watering can, etc.]. Show me how you make it "rain" using the material.
- Yes/No: Is this the [salt shaker, strainer, watering can, etc.]? Will this make a lot of rain?
- Either/Or: Which of these two materials makes more rain? Does this [material] or this [material] make larger raindrops?
- Open-ended: Why do you think the [material] makes [big/small] raindrops? What other materials could we add to the water table to make "rain"?

Week 2 | Sink or Float?

Children investigate what makes plastic eggs sink or float in water.

Science: Physical Sciences

Materials	Directions
Plastic eggs, various small classroom materials and toys of different weights and densities that can fit inside the plastic eggs (such as plastic animals, erasers, marbles, etc.)	Demonstrate how an empty plastic egg will float in water. Invite children to use the items that you have collected to fill the eggs. Test them to see if they sink or flat. What objects made the eggs sink? How much of one material was needed?

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

- Gesture: Point to an object you want to add inside one of the eggs. Thumbs up/down: did it sink? Did it float?
- Yes/No: If we add [object] inside the egg, do you think it will sink? Do you think it will float?
- Either/Or: Do you want to add this [object] or this [object]? Do you think adding this [object] inside the egg will make it sink or float?
- Open-ended: Which objects do you think will sink? Why? Which objects do you think will float? Why? Why do you think one [object] floated, but, when you added more, it sank? What other objects in our classroom could we test?

Tip

Did You Know?

While it's easy enough to test which things sink and which float, it can be harder to understand the "why." Why is it that a boat floats, but a penny sinks? The answer is density! Density is determined by how close together the molecules of an object are. The more tightly packed the molecules, the denser the object. If an object is less dense than water, it will float. Shape matters, too. If more surface area of the object is touching the water, it is more buoyant, meaning it floats better. Hollow objects, like boats, are filled with air, which is less dense than water. The shape and density is what makes a boat float!

Technology

Week 1 | Sky Video

Children capture video of things in the sky.

Science: Engineering and Technology

Materials	Directions
Tablet, camera with video capability or video camera	Encourage children to capture videos of things in the sky. Remind children how to handle technology with safe, clean hands. Teach them how to open a video recording program/app and how to start and stop recording videos. Add files to a folder that all children can access to view their own recordings or the recordings of their classmates.

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

- Gesture: Point to the app we use for videos. Point to the object you want to make a video of.
- Yes/No: Do you want to make a video of [bird, cloud, etc.]?
- Either/Or: Do you want to make a video of [bird, cloud, etc.] or [bird, cloud, etc.]?
- Open-ended: What do you want to make a video of? Why? How will you capture a video of [bird, cloud, etc.]?

Writing

Week 2 | Cloud Letters

Children trace the shape of letters with cotton balls.

Literacy: Writing

Materials	Directions
Cotton balls, paper, marker	Download and print Letter Templates from the Blueprint website. Laminate if possible. Invite children to use cotton balls to cover the letters.

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

- Gesture: Show me [letter]. Trace your finger over a straight line. Trace your finger over a curved line.
- Yes/No: Is this [letter]? Is this the uppercase letter [example]?
- Either/Or: Is this the [letter] or [letter]?
- Open-ended: What letter will you fill with cotton ball clouds today? What other material could we use to make this letter?

Tip

Celebrate Children's Writing

Celebrate children's writing by giving them the opportunity to share their work with other members of the classroom community. Be sure to post their work where everyone can see it. Remember that children's writing skills develop at different rates. Celebrate children's efforts and accomplishments no matter where they are on the continuum of writing development.

Week 4 | Asteroid Toss

Children practice naming letters.

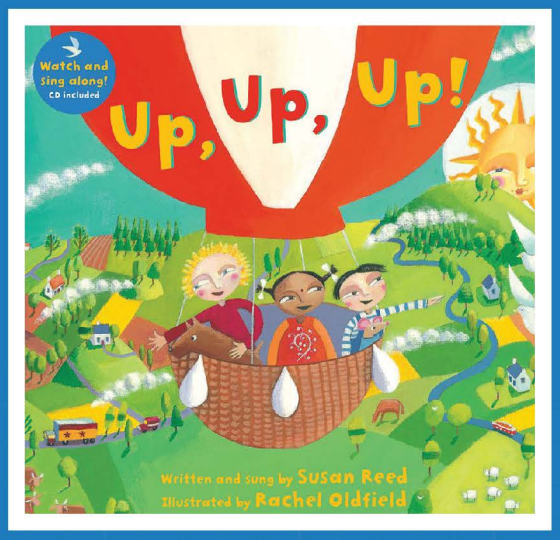
Literacy: Phonological Awareness

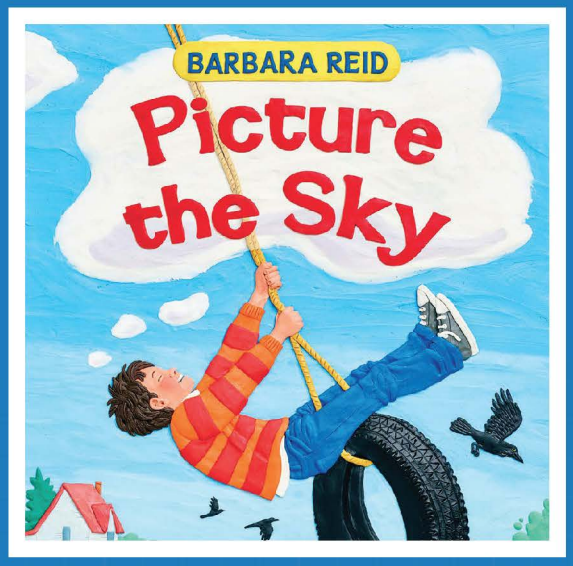
Materials	Directions
Beanbags, paper plates	Write uppercase letters that children know or are in need of reviewing on separate paper plates. Explain the game. Children stand behind a line you indicate and then gently toss an "asteroid" (beanbag) onto one of the plates. If it lands on a plate, they should name the letter it landed on.

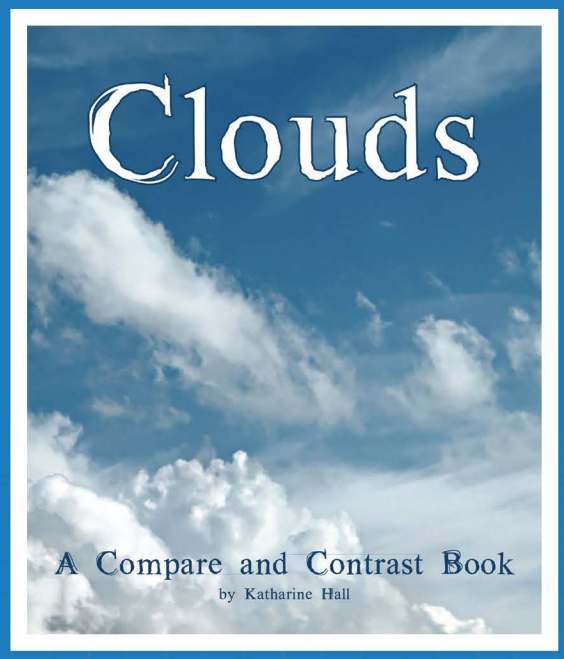
Use what you know about each child's language skills to start conversations:

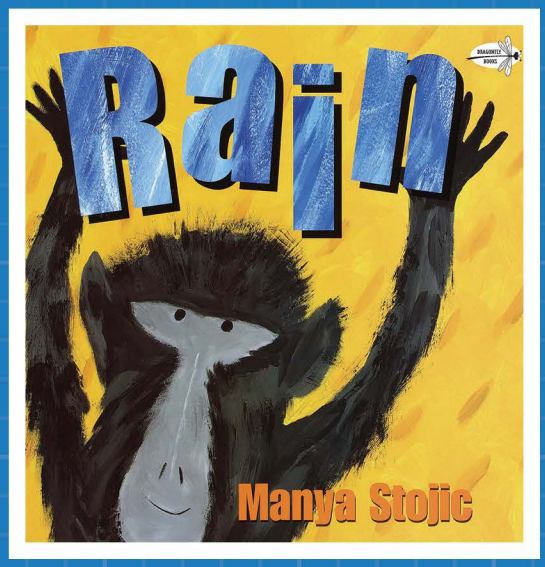
- Gesture: Show me [letter].
- Yes/No: Do you toss the asteroid on the [letter] or [letter]? Is that letter in your name? Does that letter have a straight line in it? A curved line?
- Either/Or: Did you toss the asteroid on [letter] or [letter]? Does that letter make the [example] sound or the [example] sound?
- Open-ended: What letters do you want to write on a new plate? What words do you know that begin with that letter?

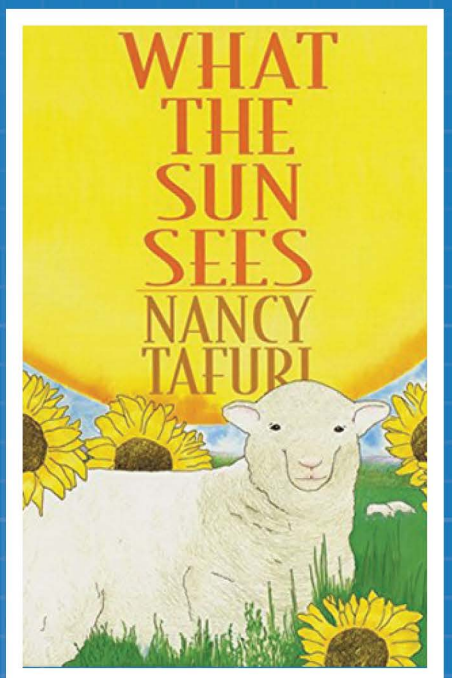
BOOKS

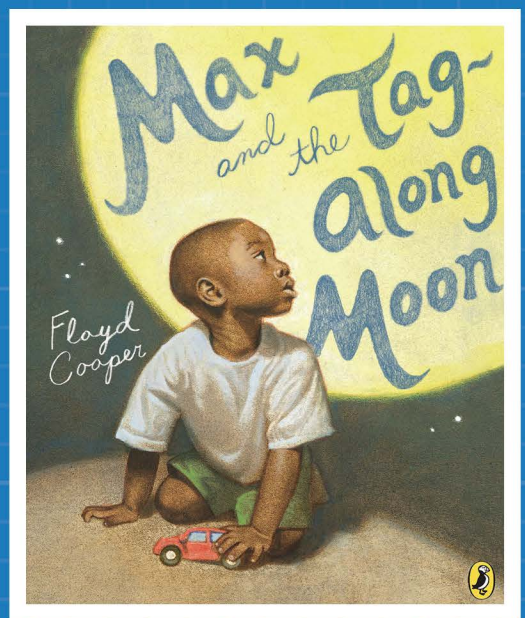












The children's books suggested here are readily available through Children's Literacy Initiative, most school or public libraries, or your local school equipment supplier.

Descriptions

Up, Up, Up!

- Written by Susan Reed
- Illustrated by Rachel Oldfield
- Barefoot Books, 2011

In this songbook, a group of children in a hot air balloon look down on Earth from great heights. As they sing and move along with the lyrics, children point out the objects that they see in the sky by observing the illustrations.

Vocabulary

- blend: to mix or blur together

Picture the Sky

- Written and illustrated by Barbara Reid
- Albert Whitman & Company, 2019

The sky is part of every person's landscape, whether it is a sliver of blue between city buildings or a wide expanse over an open field. This book's modeling clay illustrations offer many different perspectives on the sky. Children discuss how the sky changes and why. They consider what information they can learn by looking up at the sky and also how to appreciate its beauty.

Vocabulary

- masterpiece: a great work of art
- background: what is behind the objects in a picture or scene

Clouds: A Compare and Contrast Book

- Written by Katharine Hall
- Photographs from various sources
- Arbordale Publishing, 2019

This informational text offers readers vocabulary to describe the different kinds of clouds seen in the sky: fluffy, wispy, colorful, dark. The book's clear, realistic photographs allow children to see what clouds look like before and after a storm and to discover various shapes clouds can take. They practice comparing clouds based on their attributes and asking questions about the book.

Vocabulary

- wispy: light and floaty

Rain

- Written and illustrated by Manya Stojic
- Dragonfly Books, 2009

The African savanna is hot and dry, but the animals can sense the rain on its way. When the water hole is full and the trees are green, each animal enjoys the result of the precious rain – shade, mud, fruit, and water. This book invites children to use what they know about weather and their five senses to think about how animals observe and experience rain. Children think about how rain takes care of living things in different habitats.

Vocabulary

- gushed: flowed or poured out quickly
- cracked: showing lines from splitting without coming apart

What the Sun Sees, What the Moon Sees

- Written and illustrated by Nancy Tafuri
- Greenwillow Books, 1997

Two narratives meet in the middle in this picture book about day and night. The sun rises into the sky and sees various scenes on Earth: a barnyard full of animals, busy city streets, a lively playground. Then flip the book over to learn what the moon sees in the same spaces once night has fallen. The format of the book encourages children to think about the cyclical nature of day and night and compare and contrast them.

Vocabulary

- bustling: busy and moving

Max and the Tag-Along Moon

- Written and illustrated by Floyd Cooper
- Puffin Books, 2015

When Max says goodnight to his grandpa, the full moon is already high in the sky. On the drive home, Max sees the moon out of the window, no matter which way the car turns. The moon is always there even though it is far away, just as Max's grandfather is close to Max's heart even when they are not together. Children practice making personal connections to how Max feels, and they discuss how the tag-along moon relates to their own observations of the sky.

Vocabulary

- orb: sphere

One World, One Day

- Written by Barbara Kerley
- National Geographic Children's Books, 2009

From sunrise to sunset, children around the world wake up, eat breakfast, go to school, play, and spend time with family members. Photographs taken in 29 different countries balance universal experiences and cultural diversity to create a unique reading experience. As children read about one day all over the world, they make connections between their own experiences and those of others. They also generate questions about what they wonder based on the book.

Vocabulary

- horizon: the line where the sky seems to meet the earth

Hey-Ho, to Mars We'll Go!

- Written by Susan Lendroth
- Illustrated by Bob Kolar
- Charlesbridge, 2018

With text that can be sung to the tune of "The Farmer in the Dell," this book invites children to join in the fun as a diverse group of children boards a spaceship, launches into the sky, adjusts to zero gravity, grows food on board, and finally reaches Mars! Paragraphs of informational text on each page provide additional details about space travel, gravity, and other scientific facts. This book encourages children to compare life on Earth to life in space as they move and sing along.

Vocabulary

- launch: to take off; start a big move

Mission to Space

- Written by John Herrington
- Photos courtesy of NASA/JPL-Caltech
- White Dog Press, 2016

Astronaut and author John Herrington is the first enrolled member of a Native American tribe to travel in space. In this autobiographical text, Herrington tells readers how he trained for space travel and how the Chickasaw Nation celebrated his first flight in the space shuttle Endeavour. Children practice looking carefully at photographs as they learn about this important astronaut, and they share what they wonder about travel in space.

Vocabulary

- mission: an important trip

UNIT 9

WEEK 1

Be Sure To…

- ☐ Talk about what children see in the sky.
- ☐ Observe and explore how the sky changes.
- ☐ Discuss how the weather impacts decisions people make such as what to wear and what to do.
- ☐ Give children opportunities to add objects together.

Materials

- Photo (or video) of a meteorologist in your community
- Funnels, small twigs
- Variety of containers (plastic bottles, cardboard tubes, etc.
- Filler materials (beads, sand, pebbles, seeds, etc.)

Books

- *Up, Up, Up!*
- *Picture the Sky*
- *Blueprint Yoga*

Charts

- Anchor Charts:
  - "Readers Can Say"
  - "Feelings"
  - "Power of 3"
- Unit Charts:
  - "What Happens in the Sky?" (make)
  - "Words We Are Learning" (make)
  - "5 Senses" (Unit 2)
  - "Ways to Say Hello" (Unit 3)
- Unit Project: Weather Data

Why do we observe the sky?

We observe the sky to notice how it changes and to check the weather.

Children begin the unit by thinking about what we (and scientists) can learn by observing the sky. During Gathering Times, children discuss and learn yoga poses for things they may see in the sky. In Small Group, children combine sets of "clouds" and "stars" to develop foundational skills related to addition. They also create their own rain sticks.

Keep in Mind

- Prepare for the launch of the Unit Project on Day 4: Talk Time.
- Begin preparing your dramatic play center - a weather station for Day 5: 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.

Words We Are Learning

meteorologist
a person who observes the sky and talks about the weather

blend
to mix or blur together

masterpiece
a great work of art

background
what is behind the objects in a picture or scene

Multilingual Learner Anchor Words

- sky

From the Songbook

"What Will the Sky Be Today?" [Sing to the tune of "This Old Man."]

Encourage choral singing and have children sing the song together.

Invite children to help you come up with some creative movements to do along with the song.

After singing, ask children to describe the sky and weather.

Trips & Visitors

Invite family and community members who are involved in aeronautics (pilots, flight attendants, mechanics, other airport employees) to your class.

Working with Families

Send this tip home to families: Look up! Children are learning about the sky. When you are outside, or from a window, look up at the sky. What colors do you see? What do the clouds look like? How are the clouds moving? Do you see the moon? What shape is it? Talk about all the objects, shapes, and colors you see.

Remember | https://cliblueprint.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 match picture cards of objects in the sky. *Science: Earth and Space Sciences*	Children count syllables in the names of sky objects. *Literacy: Phonological Awareness*	Children listen for a word that rhymes with the object on their sky card. *Literacy: Phonological Awareness*	Children use sky cards to answer clues. *Science: Earth and Space Sciences*	Children identify letters in the word on their sky card. *Literacy: Phonological Awareness*
Movement Time	Children practice rainbow pose. *Creative Arts: Creative Movement and Dance*	Children practice star pose. *Creative Arts: Creative Movement and Dance*	Children practice plane pose. *Creative Arts: Creative Movement and Dance*	Children practice lightning pose. *Creative Arts: Creative Movement and Dance*	Children practice moon pose. *Creative Arts: Creative Movement and Dance*
Talk Time	Children discuss what they know about what happens in the sky. *Approaches to Learning: Initiative and Curiosity*	Children review what it means to think about how others feel. *Social Emotional: Social Awareness and Relationships*	Children play a rhyming game about packing a plane. *Literacy: Phonological Awareness*	Children launch the unit project. *Science: Earth and Space Sciences*	Children launch the weather station dramatic play center. *Creative Arts: Dramatic and Performance Art*
Message Time Plus	Children change the beginning sound in words to make new words. *Literacy: Phonological Awareness*	Children use the power of observation to search for details in a picture. *Science: Scientific Inquiry and Practices*	Children use clues to solve a riddle about the sky. *Literacy: Listening and Speaking*	Children learn the word “masterpiece.” *Literacy: Vocabulary*	Children listen to sounds in the sky and describe what they hear. *Science: Scientific Inquiry and Practices*
Intentional Read Aloud	Children identify what they see in the sky. *Science: Earth and Space Sciences*	Children sing along with the book. *Literacy: Fluency*	Children describe how the sky changes. *Science: Earth and Space Sciences*	Children discuss what information we get from the sky. *Science: Earth and Space Sciences*	Children think about how people feel. *Literacy: Comprehension*
Small Group	Children play the game “Count the Clouds.” *Math: Operations and Algebraic Thinking*	Children play the game “Roll, Count, Combine.” *Math: Operations and Algebraic Thinking*	Children play the game “Count the Clouds and Stars.” *Math: Operations and Algebraic Thinking*	Children play a variation of “Roll, Count, Combine.” *Math: Operations and Algebraic Thinking*	Children create a rain stick. *Creative Arts: Music*
Reflection Time	What did you learn about the sky today?	When did you think of another person’s feelings today?	If you could travel in a hot air balloon, where would you go?	Can you tell us about a masterpiece you created?	Why do we observe the sky?

Centers to Launch

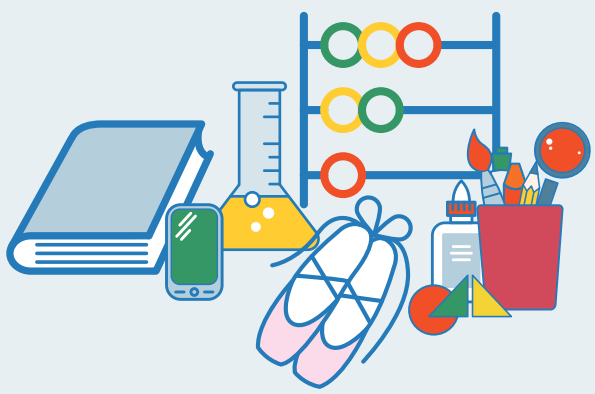
See Pages **14-23**

Dramatic Play | Weather Station

Library Center | Sky Book Basket

Science Center | Sky and Ground Sort

Technology Center | Sky Video



1 Gathering Times

Science, Creative Arts, Approaches to Learning

Greeting Time

Children match picture cards of objects in the sky.

Science: Earth and Space Sciences

CONNECT to observing nature. ASK children what they can see in the sky.

We have been exploring nature. One part of nature we can observe is the sky! What can you see in the sky?

PREVIEW the cards. PROMPT children to name the objects. DISCUSS any objects they do not know.

What is the name of this object?

DISTRIBUTE the cards. KEEP a rainbow card. EXPLAIN that you will name an object. INVITE children with that object on their card to walk to the middle of the circle and greet each other.

I will name an object in the sky. If you have that object on your card, walk to the middle of the circle and greet each other.

What are some ways we can greet each other? Yes, we can use our Unit 3 Chart: "Ways to Say Hello" for ideas.

MODEL by naming the object on your card.

If you have a rainbow [show], please walk to the middle of the circle.

Hola! Now let's walk back and sit down.

NAME other objects until everyone has had a chance. COLLECT the cards.

Make & Prepare

- Download and print the sky cards (one for each child). These include sun, moon, cloud, star, rainbow, bird, plane, and lightning bolt. Laminate if possible.

Additional Material

- Unit 3 Chart: "Ways to Say Hello"

Supporting Multilingual Learners

Explicitly teach the word "sky" for new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (using an online translation tool). This will support their comprehension of the thematic content.

Movement Time

Children practice rainbow pose.

Creative Arts: Creative Movement and Dance

SHOW rainbow card. REFER to the rainbow page in the book *Blueprint Yoga*. ASK children what they notice.

One special thing we may observe up in the sky is a rainbow [show card]. Who had a rainbow card in Greeting Time?

Let's look at the rainbow page in our yoga book. What do you notice? Yes, a rainbow bends up and over in an arch. We practiced this pose when we learned about mixing colors! Can we pose like a rainbow again?

MODEL rainbow pose. GUIDE children to practice the pose on each side.

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. 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 overhead. Stretch into an arch. Do you feel like a rainbow in the sky?

Bring your hand and knee back down. Let's make a rainbow on the other side.

Make & Prepare

- Review how to do rainbow pose on the *Blueprint* website. Be ready to model it, or prepare another adult or a child to do so.

Additional Materials

- Rainbow card
- *Blueprint Yoga*

Connections to Other Units

The word "rainbow" was introduced in Unit 2 when children explored how foods come in all different colors and read the book *Who Eats Orange?* We returned to rainbows in Unit 6, Week 3 when we focused on colors.

Talk Time

Children discuss what they know about what happens in the sky.

Approaches to Learning: Initiative and Curiosity

DISCUSS what children know and wonder about the sky. Below are some guiding questions. CHART children's ideas.

We know so much about nature. We talked about things that can be found underground, such as worms and rocks. We talked about animals that are found in trees, such as birds and spiders. We talked about habitats all over the world.

Let's continue learning more about the world around us by looking up! The sky is a special part of nature that we can observe or look at.

- What happens in the sky?
- What do you know about the sky?
- What is the sky?
- What do you see in the sky?
- Why do we observe the sky?
- How does the sky change?
- What do you wonder about the sky?
- What other questions do you have?

We are going to be observing, wondering, and learning even more about the sky!

Make & Prepare

- Launch a unit chart titled "What Happens in the Sky?"

Additional Materials

- Markers

Remember…

While the three components of Gathering Times flow, they do not need to occur one right after another. You might use one as a transition activity, you might repeat the song or movement, etc.

Reflection Time | What did you learn about the sky today?

Children change the beginning sound in words to make new words.

Before

CONNECT to wondering about the sky. FOCUS on the sun.

In Talk Time, we thought about how the sky is a special part of nature. We discussed some things we know about the sky and some things we wonder. One thing that is in the sky is the sun!

ASK children what they like to do on when the sun is out.

What do you like to do when the sun is out?

All those things sound like fun! I like to run in the sun.

INVITE children to compare two rhyming words.

Listen to these two words: run, sun. What do you notice about them?

Yes, they rhyme. They sound the same at the end. What's different about them? Listen again: run, sun.

Yes, the first sound in each word is different.

TELL children they are going to practice changing the beginning sound in a word to a new sound.

We are going to change the beginning sound in the word "run" and make a new word.

Say "run." Change the beginning sound in "run" from /r/ to /s/? What's the new word? Sun.

Yes, sun! I like to run in the sun! I'll write about that in the message today!

During

DRAW a picture of yourself running with the sun shining. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is a picture of me running outside. Now I want to draw the sun. Where should I draw it?

Suggested message: "I like to run in the sun."

PAUSE to focus on phonological awareness (changing the /r/ in "run" to /s/).

I'll need your help with the next word. Say run: run. Change the /r/ in "run" to /s/. What's the word? Sun! Now I'm ready to write the word. Which letter makes the sound /s/? Yes, the *letter s*.

INVITE children to reread the message with you.

After

ENGAGE children in a phoneme substitution activity. INVITE children to orally change the beginning sound in the word family –un to make a new word. Follow the format below.

We just changed the beginning sound /r/ in "run" to /s/. We made the word "sun!" When you change the beginning sound in a word, you can make a new word.

Let's try it again. When I run in the sun, I have fun! Listen carefully and think about the beginning sound.

Say "sun." Now change the beginning sound in the word "sun" from /s/ to /f/. What's the new word? Fun!

RESTATE that you can make a new word by changing the beginning sound to a new sound.

Today you changed the beginning sounds in words to make some new words.

REREAD the message one more time.

[Transition] INVITE children to show you what they look like when they have fun.

Running in the sun is fun. Show me what your face looks like when you have fun!

Responding to Children

Today you will model phoneme substitution. This activity invites children to listen carefully to a word, isolate the beginning phoneme, and substitute it for another. Then children say the new word. This complex activity requires modeling and practice. As with all these phoneme manipulation activities, give children multiple opportunities to practice.

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.

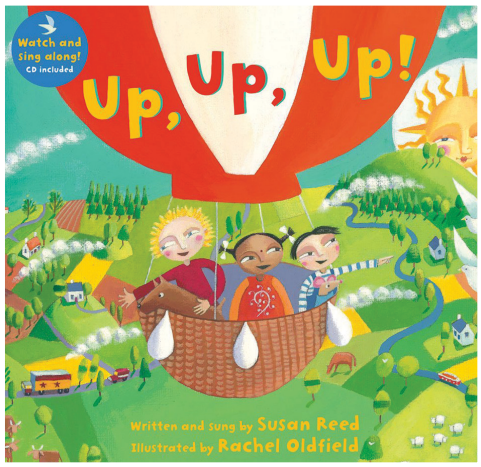
Keep it Going

- While in line, invite children to continue playing the listening game from the MTP lesson. Say a word, then a different beginning sound and encourage them to share the new word. What new word does it make? Examples of words to use: light-fight, mice-nice, me-be, boo-zoo.
- Provide children with magnetic letters of their name. Invite them to choose a different letter to start their name with. What letter did they choose? What new name did they make?

1 Intentional Read Aloud

Science: Earth and Space Science

Children identify what they see in the sky.



Make & Prepare

- This is a songbook. Familiarize yourself with the tune by listening to the audio recording that accompanies the book. Decide how you will use the audio with your class. Will you play it before or after your read aloud?
- Review the ASL sign for "I see" on the *Blueprint* website.

Additional Materials

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

Words We Are Learning

blend: to mix or blur together

Connections to Other Units

In Unit 8, children learned about camouflage when discussing how some animals blend into their environment. Support children's vocabulary development by making connections between how the word "blend" was used in this book (parts of nature blended together or became indistinct because the children were so far away) and how animals blend into their environment. In both cases, to blend means to make it hard for an individual item to be seen.

Did You Know?

The first hot air balloon launched in France in 1783. In May, 1961, the current altitude record was set by Commander Malcolm Ross and Lieutenant Victor A. Prather, Jr. of the US Navy. They rose to an altitude of 113,740 feet (34,668 m). Be sure to let children know that the places in the book, such as the moon, are too high to be visited by a hot air balloon.

Before

CONNECT to observing the sky. SHOW the cover. FOCUS on the hot air balloon.

We have been talking about nature. Now we are beginning to think more about the sky. How would you like to travel up in the sky?

Today we are going to read a songbook about some children who travel in the sky. The title is *Up, Up, Up!* It is written by Susan Reed and illustrated by Rachel Oldfield.

Look at the front cover. What are the children riding in?

Yes, the children in this book are flying in a hot air balloon [point]. Have you ever seen a hot air balloon? What do you know about them?

INVITE children to point out what else they see on the cover. PROMPT them to use the sign and sentence stem "I see."

From their hot air balloon, these children can look up [point up] to see the sky and look down [point down] to see the Earth. Look at the cover. What do you see? If you want to share, sign "I see" [demonstrate]. Say, "I see…"

Let's read *Up, Up, Up!* to find out what else these children observe!

During

SING the whole book, or sing the chorus only and read the parts in between.

Pause after "I'd trade places with a bird so I could fly." INVITE children to share what they are observing in the sky. REMIND them to use the sign and sentence stem, "I see."

These children are just like scientists, observing so much while riding in their hot air balloon! What do they see in the sky? What do you see in the sky in the book? If you would like to share, sign, "I see." Say, "I see…"

Yes, we can observe the sun, moon, stars, clouds, birds, and more! Let's keep reading and observing the sky!

Pause after "And it's green!" DEFINE "blending." ADD "blend" 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 is this a picture of? Yes, it is planet Earth! And the jungles, mountains, and other parts of nature are blending together. Can you say "blend"? What does "blend" mean?

When things blend, they mix or blur together. We know some animals can blend into their environment. The children are looking down at Earth all the way from outer space. From that far away, many parts of nature blended together, and they look green!

Let's add "blend" to the list of words we are learning. Do you know any other words that mean the same thing?

After

MODEL and INVITE children to pretend to float like hot air balloons around in a circle.

We observed many things in the sky! Let's imagine that we are traveling up in the hot air balloon, too!

Please stand and form a circle. Use your arms to make a round balloon shape over your head like this [demonstrate]. Let's stand on your tiptoes and walk around in a circle. Pretend you are floating through the air. Look up! What do you see in the sky?

Now float back to your seat….

ASK children to tell a partner what they imagined in the sky. ENCOURAGE them to use the sentence stem, "I see…"

What did you imagine you could see in the sky? Lean and tell a partner. You can say, "I see…"

Children play the game “Count the Clouds.”

Build Interest

CONNECT to the book *Up, Up, Up!*. INVITE children to join in singing the repeating phrases.

We are looking up and thinking about what we see in the sky! We just sang along to the book *Up, Up, Up!* [show marked page]. Let’s sing the repeating phrases again. Join me!

Up, up, up, up in a balloon.
Up so high I can touch the moon.
Up, up, up, sailing with the clouds.
Look at me! I’m so high, I can fly, I know how.

TELL children they are going to make clouds for a game. SHOW the materials (paper choices and drawing tools). INVITE them to choose their materials and then draw a cloud.

Do you think it would be fun to be up in the sky with the clouds?

We are going to imagine we are clouds as we play a game today. To help us, let’s make some clouds!

Here are some paper choices [point] and some drawing tools [show]. Select what you want to use.

What will your cloud look like?

CLEAN up the materials.

Build Understanding

MAKE a yarn circle. INVITE children to sit around it.

Let’s all move so we are sitting around this yarn circle [show].

EXPLAIN the game “Count the Clouds.” CHANT the song below. TAP the corresponding number of children and invite them to walk inside the circle. Then DISCUSS how many children are in the circle in all.

We are going to play “Count the Clouds.” Let’s imagine you are clouds! Hold up your cloud picture like this [demonstrate].

I’m going to walk around and sing a song about how many clouds I see in the sky. If I tap your shoulder like this [demonstrate], you should stand up and walk inside the yarn circle. Ready?

PLAY the game. CHANT as you tap the corresponding number of children.

Up, up, up, sailing with the clouds. I see TWO clouds [tap two children].
Up, up, up, sailing with the clouds. I see ONE more cloud [tap one child].

REVIEW the quantity of clouds inside the yarn circle. ASK children how many there are altogether.

Look at the clouds in the circle! How many clouds are there? How do you know?

Yes, first we added two clouds to the circle. Then we added one more. That gave us a total of three clouds. When we combined the clouds, we made a bigger number.

Build Experience

ASK children to return to their spots. CONTINUE to play the game “Count the Clouds.”

Ok clouds, if you are in the circle, please go back to your spot. Let’s keep playing “Count the Clouds.”

SUMMARIZE combining two numbers.

Today we played the game, “Count the Clouds.” You were clouds! We counted the number of clouds in the circle to tell how many. We learned that you can combine or add numbers together to make a bigger number.

Make & Prepare

- Have the book *Up, Up, Up!* ready. Mark one of the pages that begins “Up, up, up, up in a balloon…” with a sticky note.
- Create a yarn circle. It should be big enough for the number of children in your group to sit around.

Additional Materials

- Clipboards (one per child)
- Paper choices
- Drawing tools

Remember to Save

Children’s cloud drawings and yarn circles will be used again in Small Group Day 3.

Build Background Knowledge

Look at shapes of the clouds in the book *Up, Up, Up!*. Discuss the shapes of the clouds they see before drawing.

Stretch Their Thinking

Invite children to take a turn to tell the number of clouds they see. Can they lead the group through the game?

Listen/Look for

- What do children understand about combining numbers?
- Can children follow directions?

Robust STEM Activities

Small Group Days 1-4 address number composition. These activities help children work with the structure of numbers. How many make six (composition)? Is there more than one way to make six (composition)? Using concrete objects gives children the opportunity to see a visual representation of the number and how it is composed, notice patterns in the number system, and strengthen their number sense.

2 Gathering Times

Literacy, Creative Arts, Social Emotional

Greeting Time

Children count syllables in the names of sky objects.

Literacy: Phonological Awareness

DISTRIBUTE the cards. HOLD onto a star card. ASSESS that all children know the object on the card.

Do you know what object is on your card? Sign "yes" [demonstrate] if you do. Or show it to a neighbor for help.

ASK children to count syllables in the name of their objects. MODEL with "star."

Can you find the syllables or beats in the name of each of your objects? For example, I have a star. Help me find the syllables in that word: star. How many beats did we find? Yes, one. Hold up one finger.

MODEL and INVITE children to "float" like a hot air balloon (make a circle with arms overhead and walk on tiptoes) to the middle if their object's name also has one syllable (i.e. star, sun, moon, cloud, bird).

Does your sky object also have one syllable? If it does, float to the middle of the circle like the hot air balloon in our book *Up, Up, Up!* [show].

Let's count the syllables in these words together. What's on your sky card, [name]? Can you all count the syllables in "sun"? Sun. Yes, there is one beat in that word!

REPEAT with two-syllable words (i.e. rainbow, airplane, and lightning). COLLECT the cards.

Make & Prepare

- Review the ASL sign for "yes" on the *Blueprint* website.

Additional Materials

- Sky cards
- The book *Up, Up, Up!*

Scaffolding Children

We ask children to identify whether they know the name of the object on the card. This scaffolds children's learning because it gives them the opportunity to check their understanding and get help if they need it.

Movement Time

Children practice star pose.

Creative Arts: Creative Movement and Dance

SHOW a star card. REFER to the star page in the book *Blueprint Yoga*. NOTE the five points.

One thing we may observe in the sky is a star [show card]. Who had a star card in Greeting Time?

Let's look at the star page in our yoga book [point]. What do you notice?

How many points does a star have? Let's count them together... We can make five points with our body parts. Let's pose like a star!

MODEL doing star pose. GUIDE children to practice the pose.

I start standing. First, I space my feet out and make my legs long. My feet make two points of the star. Next, I stretch my neck long, so my head is the third point. Then I stretch my arms up and out like a *letter v* to make the fourth and fifth points. I can wiggle my fingers to make my star twinkle!

Now it's your turn to practice star pose! Start standing. Space out your feet to make two points. Make your head the third point by stretching through your neck. Ready to add the fourth and fifth points? Stretch both arms up and out. Wiggle your fingers like a twinkling star!

Make & Prepare

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

Additional Materials

- A star card
- *Blueprint Yoga*

Yoga Pose Cards

Remember, 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 review what it means to think about how others feel.

Social Emotional: Social Awareness and Relationships

ENCOURAGE children to share how they feel. PROMPT them to use the sentence stem, "I feel…"

Stretching and doing yoga makes me feel calm [point to the Anchor Chart: "Feelings"]. All of us have different feelings! How do you feel right now?

Lean and tell a partner. You can say, "I feel…" Use the Anchor Chart: "Feelings" to help you.

USE Sayeh and Elijah, the social emotional puppets to share their feelings.

Elijah: When I do yoga, I feel happy.

Sayeh: I am feeling upset because I couldn't do star pose.

INVITE children to suggest how Elijah can be caring toward Sayeh. ROLE-PLAY some of their ideas.

One way we can take care of each other is by thinking about how others feel, too. When we think about others' feelings, we are being caring. Elijah cares about Sayeh. How can he show her that he cares about how she feels? What can he say or do?

CONNECT to Power of 3. REVISIT "Think about how others feel."

One way we can take care of each other is by thinking about how others feel. That is on our Power of 3 [point]. Please read it with me: Think about how others feel.

Materials

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

Power of 3

Continue to recognize and celebrate when you see children putting these responsibilities into action. Remember to take photographs of children "caught" in the act of being responsible and add them to the "Power of 3." Refresh these photographs regularly.

Reflection Time | When did you think of another person's feelings today?

Children use the power of observation to search for details in a picture.

Before

ASK children what it means to observe. REFER to the Unit 2 Chart: "5 Senses" to review.

What does it mean to observe? Yes, when we observe, we use our senses to learn more about the world. Do you remember what our senses are?

SHOW the image from the marked page in the book *Up, Up, Up!*. INVITE children to practice their power of observation by looking closely for an object you name.

Let's use one of our senses, our eyes [point], to look closely at one of the illustrations from the book *Up, Up, Up!* Here is one page from the book [show page]. Use your power of observation to look for the sun. Do you see the sun? Sign "yes" [demonstrate] if you do. Who can come up and point to it?

You used your power of observation to look closely at the picture. Watch as I write about that in our message.

During

DRAW a picture of a sun. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is the sun that we observed. What else should I draw?

Suggested message: "We observed the sun."

PAUSE to focus on concepts of print (spaces between words).

I just finished writing the word "the." Before I write the next word, I want to leave a finger space. We don't want to squish our words together! The space shows your reader where one word ends and the next word begins. Now I can begin writing the word "sun."

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

After

TELL children they will continue to use the power of observation. DISTRIBUTE an image of the sky to partners. NAME some items and invite children to point to the item if it appears in their picture. INVITE children who speak the same home language to work together. CHOOSE a few questions from the examples below.

Let's continue to use our power of observation. Here is a picture of the sky [distribute]. With a partner, observe the picture of the sky. I'll name something. Search your picture. If it appears in your picture, point to it.

- Do you see clouds?
- Do you see a triangle? Square? Circle?
- Do you see an animal?
- Do you see the color blue? Red? Yellow?
- What else can we look for?

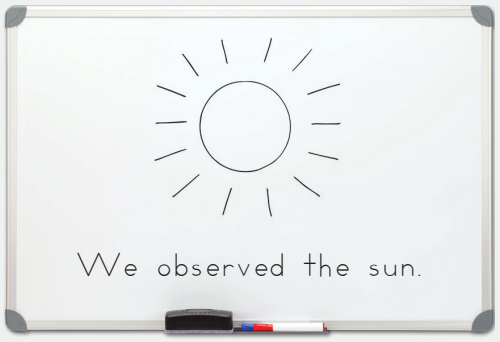
RESTATE the importance of the power of observation.

Today we used the power of observation to look closely for things in a picture of the sky. This means we looked closely with our eyes [point]. When we observe carefully, we can notice details.

REREAD the message one more time.

[Transition] ASK children what they would tell someone about using the power of observation.

What would you tell someone about using the power of observation?



Make & Prepare

- Download and print images of the sky from the *Blueprint* website (one for each pair of children).
- Have the book *Up, Up, Up!* ready. Mark the page that begins "Trains are fun, cars are fast…" with a sticky note.
- Retrieve the Unit 2 Chart: "5 Senses."
- Review the ASL sign for "yes" on the *Blueprint* website

Remember to Save

- Images of the sky for Day 8: MTP

Concepts of Print

Before children can learn to read, they need to learn print conventions, such as reading from left to right and knowing that groups of letters make up words. One great way to teach these print conventions is to help children learn to track print by using a finger or a pointer to follow the words and lines as they are read aloud. Big books or your messages can easily be used to help children practice tracking print.

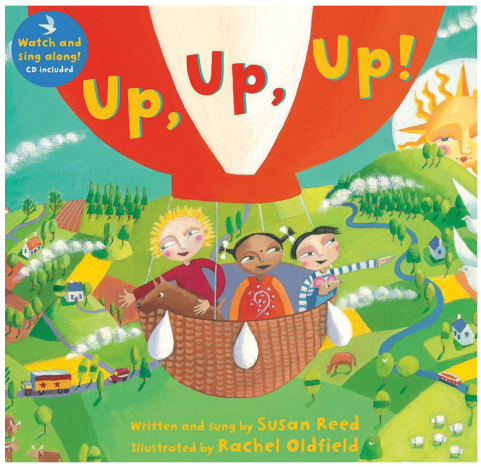
Keep It Going

- While children are outside on the playground, encourage them to observe their surroundings. Do they see clouds? Is there grass? Any animals? Invite them to share what they observe, or draw their observations with chalk.
- Play "I Spy." Can they use their power of observation to find objects around the room? For example, "I spy with my little eye something that holds water. It is white. It has a container of soap on it. Look around the room. What do you think it is?"
- Invite children to use their power of observation with other objects. For example, use your local flag or the flag of the United States and invite children to describe the colors and/or shapes they see. What else is pictured on these flags?

2 Intentional Read Aloud

Literacy: Fluency

Children sing along with the book.



Make & Prepare

- This is a songbook. Familiarize yourself with the tune by listening to the audio recording that accompanies the book. Decide how you will use the CD with your class. Will you play it before or after your read aloud?
- Chart the repeating refrain:

  Up, up, up, up in a balloon.
  Up so high I can touch the moon.
  Up, up, up, sailing with the clouds.
  Look at me! I'm so high, I can fly, I know how.

Additional Material

- Unit Chart: "What Happens in the Sky?"

Encourage Participation

Children love to share in read alouds. When a favorite book is read and reread, they chime in with repeated phrases or call out rhyming words. These activities are vital early reading skills and help prereaders develop fluency, phonemic awareness, and a feel for the rhythms of language.

Before

CONNECT to observing the sky. ASK children to name what they saw in the sky in the book.

We can observe and explore the sky! In this songbook *Up, Up, Up!* some children go on a hot air balloon ride in the sky. What are some of the things that they see in the sky?

Wow, there is so much to observe in the sky!

Today let's imagine we are flying along in the hot air balloon!

SHOW the chart. INVITE children to sing along with the chorus of the songbook.

As we read *Up, Up, Up!* please sing along! Here is the part of the song that repeats a few times in the book [point to chart]. Let's practice singing this part together now!

Up, up, up, up in a balloon.
Up so high I can touch the moon.
Up, up, up, sailing with the clouds.
Look at me! I'm so high, I can fly, I know how.

GUIDE children to pretend to float like a hot air balloon (make a round shape with arms overhead and walk in place on tiptoes), as they sing the chorus again.

Every time we sing the part of the song that repeats, let's pretend to float like a hot air balloon! Let's practice that now.

Please stand in your spot. Make your arms in a round shape overhead like this [demonstrate]. While we sing, we can tiptoe in place. Let's sing again [point to the chart]! Now we can sit back down.

Get ready to sing and float in the sky!

During

SING the whole book, or just the chorus and read the parts in between.

INVITE children to sing along with the chorus each time, and pretend to float like hot air balloons.

After

RETURN to the Unit Chart: "What Happens in the Sky?" INVITE children to add what they are learning and other questions they have.

- Did you enjoy our hot air balloon ride in the sky?
- Think about all you observed. So much happens in the sky! What can we add to our chart?

Children play the game “Roll, Count, Combine.”

Build Interest

SHOW a bowl of cotton balls. INVITE children to explore it. REFER to the Anchor Chart: “We Can Describe.”

We are talking about what we see in the sky. Look at these cotton balls [point]. Do they remind you of anything you might see in the sky?

Yes, some people think cotton balls look just like fluffy clouds!

Let’s explore them. How do they look? How do they feel? You can use the Anchor Chart: “We Can Describe” to help you.

COLLECT the materials.

Build Understanding

EXPLAIN the game “Roll, Count, Combine.”

We are going to play “Roll, Count, Combine” with these cotton balls. Each of you will take a turn to roll a die [show] and count out that many cotton balls. Then you place them on the blue sky mat [show]. What do you notice about the mat?

Yes, it has a line going across it. Be sure to place your cotton balls on that line. Then we will figure out how many we have altogether! Ready?

WORK TOGETHER to play “Roll, Count, Combine.” INVITE a child to be your partner. TAKE TURNS rolling a die and counting out cotton balls. Then COMBINE the quantity and DESCRIBE what you are doing. An example follows.

I will roll a die. I rolled a five. Now I will count out five cotton balls and place them on this line on the blue sky mat.

Who would like to go now? Roll a die, count out the cotton balls, and place them on line on the mat.

Now that we have both rolled and counted out cotton balls, how many do we have altogether? How can we figure it out? Can you describe what you see?

Build Experience

INVITE children to work in partnerships to play “Roll, Count, Combine.” DISTRIBUTE bowls of cotton balls, blue paper mats, and dice. INVITE children who speak the same home language to play with each other in their home language to solidify and extend their learning.

Now it is your turn to work with a partner to play “Roll, Count, Combine.” Here are your cotton balls, a blue paper mat, and a die to roll. Both players will take a turn to roll and count out cotton balls. Be sure to place them on the line. Then try to answer the question, how many cotton balls do you have altogether?

REVIEW playing “Roll, Count, Combine.” INVITE children to share how they worked.

Today we played the game, “Roll, Count, Combine.” We used cotton balls as clouds! We worked on figuring out how many cotton balls we had altogether. Who would like to share?

Make & Prepare

- Draw a horizontal line across a blue piece of construction paper (one per partnership).
- Bowls of cotton balls (12 per partnership)

Additional Materials

- Anchor Chart: “We Can Describe”
- Dice (one die per partnership)

Remember to Save

- Cotton balls, dice, and blue construction paper mats will be used again in Small Group Day 4.

Build Background Knowledge

Play “Count the Clouds” from Day 1: Small Group if children need more time engaging as a group in a guided combining activity.

Stretch Their Thinking

Invite children to tell a number story and then act it out or draw it. For example, "I have five cotton balls. My partner has two cotton balls. How many do we have?"

Listen/Look For

- How do children work with their partner?
- Do children subitize or count the number of dots on dice?
- What words do children use to describe how they added?

Responding to Children

Are children able to accurately count to 20? If so, have them practice counting even higher. If not, give them more practice with number songs and verbal counting.

Scaffolding Children

In this lesson, we motivate children by giving them time to explore new materials. This scaffolds children’s learning by getting them interested in the topic!

3 Gathering Times

Literacy, Creative Arts

Greeting Time

Children listen for a word that rhymes with the object on their sky card.

Literacy: Phonological Awareness

DISTRIBUTE sky cards. HOLD onto a crane card. ASSESS that all children know their object.

Do you know what object is on your card? Sign "yes" [demonstrate] if you do. Or show it to a neighbor for help.

EXPLAIN that you will say a word that rhymes with the name of a sky object.

Many of these objects are in our book *Up, Up, Up!* [show]. Some of the words in this songbook rhyme. How do we know when words rhyme? Yes, they sound the same at the end.

I'm going to say a word that rhymes with the name of an object in the sky. If what's on your sky card rhymes with it, come to the middle of the circle.

MODEL with "crane" and the plane card. INVITE children to "float" like a hot air balloon to the middle if their card rhymes.

Listen carefully to the first word: crane. What is in the sky that rhymes with "crane"?

Yes, I have a plane on my card. Crane, plane. Those words sound the same at the end. If you also have a plane, let's float like hot air balloons [demonstrate] to the middle and greet each other.

REPEAT with additional rhyming words (i.e. star, sun, moon, cloud, bird, rainbow, etc.). INVITE children to suggest rhyming words, too.

Make & Prepare

- Review the ASL sign for "yes" on the *Blueprint* website.

Additional Materials

- Sky cards
- The book *Up, Up, Up!*

Movement Time

Children practice plane pose.

Creative Arts: Creative Movement and Dance

SHOW a plane card. REFER to the plane page in the book *Blueprint Yoga*.

One thing we may observe in the sky is a plane [show card]. Who had a plane card in Greeting Time?

Let's look at the plane page in our yoga book. What do you notice?

Plane is a balancing pose. It lets us pretend we are flying in the sky looking down at Earth.

MODEL plane pose. GUIDE children to practice the pose on each side.

Watch as I practice plane pose. I start standing. First, I stretch one leg straight back and lean forward. Next, I reach both arms out like plane wings. I try my best to balance. Do I look like a plane?

Now it's your turn to practice plane pose. Spread out so everyone has enough space. Stretch one leg straight back as you lean forward. Reach both arms out to the sides like plane wings. Try your best to balance.

Imagine you are flying in the sky looking down at Earth. What do you see?

Slowly come back up to stand. Get ready to try plane pose with the other leg.

Make & Prepare

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

Additional Materials

- A plane card
- *Blueprint Yoga*

Talk Time

Children play a rhyming game about packing a plane.

Literacy: Phonological Awareness

ACTIVATE children's knowledge about planes. DISCUSS the purpose of planes.

We just posed like a plane [show card]. What do planes do? Why are they helpful?

Yes, planes help bring people and things from one place to another quickly! Planes fly through the sky, so they travel over land and water. When people go on a plane, they pack what they need to bring on their trip.

EXPLAIN how to play a rhyming game "Pack the Plane."

Let's play a game called "Pack the Plane." Pretend we are going on a plane ride, and we can only bring words that rhyme!

So, we will start by saying, "Let's pack the plane with a…" and then I will say a word. As we go around the circle, you will have a turn to say another word that rhymes!

START the game by saying a word (i.e. "hat"). PROMPT the next child to say a rhyming word. GUIDE children around the circle. PROVIDE support or start over as needed.

Here we go: Let's pack the plane with a… hat! [Name], can you say a word that rhymes with "hat"? Yes, hat, mat… [Name]?

Material

- A plane card

Responding to Children

When asked to produce rhyming words, children may say a "silly" or nonsense word. As long as the nonsense word sounds the same at the end as the original word, affirm that the word does in fact rhyme. You can choose whether or not to note that the nonsense word is not an actual word. For example, a child is finding a rhyming word for "star" and says "dar." You might say, "Yes! 'Dar' is a silly word that rhymes with 'star.' 'Star' and 'dar' sound the same at the end. They rhyme!"

Reflection Time | If you could travel in a hot air balloon, where would you go?

Children use clues to solve a riddle about the sky.

Before

FOCUS on learning about what is in the sky. TELL children they are going to use clues to guess what is in the sky.

Today I have a riddle for you! It is about something that is in the sky. We've had fun guessing the answer to riddles before. Remember, to solve a riddle you need to listen carefully [point to ears] to the clues and think [point to temple] about what you know that is in the sky. Let's try one together.

I am thinking of something in the sky. It has wings. It has a motor. It flies very fast. What do you think it is?

Yes, I was thinking of an airplane.

Let's play again. Watch and listen as I draw some pictures and write a sentence. You can use these clues to guess the answer to the riddle. It will be something found in the sky.

During

DRAW a picture of the ground and a flower growing. DESCRIBE what you are doing and thinking. INVITE children to participate.

I am in the sky. I am very bright. I help flowers grow. Here is a picture of a flower. It is growing nice and tall because of me. What color should the flower be?

Suggested message: "I help flowers grow."

PAUSE to focus on phonological awareness (/h/ in the word "help").

Help. Say that with me: help. What sound do you hear at the beginning of the word "help"? /h/. What letter makes the /h/ sound? Yes, the *letter h* makes the /h/ sound. When I write the lowercase *letter h*, I drop down and make a hill. Now you try writing it with your finger in the air.

Finish writing the message. INVITE children to reread the message with you.

After

ASK children to guess what's in the sky that you described in your picture.

I drew some picture clues [point to the picture]. I wrote some word clues [sweep your finger under the words]. Who thinks they know the answer to my riddle? What was I describing that is in the sky?

Take a moment to think [point to temple]. Now whisper in your hand and guess what you think I was describing.

Let's share. What do you think is the answer to the riddle?

Yes, it is the sun. How did you know?

ASK children to describe another clue about the sun.

What other clues could I have given to help you guess I was describing the sun?

REREAD the message one more time.

[Transition] ASK children to think of what else is in the sky that they could make a riddle for.

What else do you know that is in the sky that we could create a riddle for?

Connecting MTP Lessons

In this lesson we suggest you focus on the *letter h* when you write the word "help." 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.

Reflect on Your Language

Reflect on the language you are using with children. Is your language framed around "rules" or do you speak to children about their "responsibilities?" If children feel they are doing something because it is their responsibility, they have more ownership over their behavior and more awareness of how their behavior affects others.

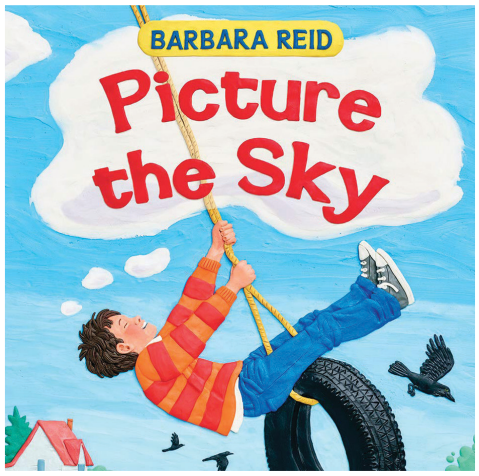
Keep It Going

- Join children at the writing center. Together, create more sky riddles.

3 Intentional Read Aloud

Science: Earth and Space Science

Children describe how the sky changes.



Material

- Unit Chart: "Words We Are Learning"

Words We Are Learning

masterpiece: a great work of art

Barbara Reid

On Barbara Reid's website, you can find information about her other books as well as a variety of information about child-friendly ways to make plasticine illustrations, similar to the ones made by Reid herself. There are videos on using plasticine to make pictures as well as samples made by children. Reid's website also has a list of questions about her work sent to her by readers. https://barbarareid.ca

Vocabulary Development

"Picture" is a word with multiple meanings depending on how it's used. As a noun, it is synonymous with the word "illustration" or "image" ("Here is a picture of a dog"). But it can also be used as a verb to mean imagine ("Picture a dog in your mind"). Make sure to clarify its different usages. Use pictures and gestures to provide context for children. Also invite them to share the words they use at home to clarify meaning.

Keep It Going

- Take children outside to observe the sky. Bring art supplies and encourage children to draw/paint what they see (carefully, not looking at the sun). Then toward the end of the unit, invite them to draw the sky again. Have them compare their drawings. Has their exposure to the content of the unit changed their observations?

Before

INVITE children to imagine and describe a picture of the sky. AFFIRM that the sky looks different and changes.

If you created a picture of the sky, what would it look like? Describe it to a partner!

You described different ways the sky could look. The sky can look all different ways. The sky changes.

SHOW the cover. EXPLAIN that "picture" means to think about how something looks.

Today we are going to read a book called *Picture the Sky* written and illustrated by Barbara Reid. In the title the word "picture" means to imagine or think about how something looks. Since the sky can look different ways, there can be many ways to "picture" the sky!

INVITE children to describe the sky on the cover. ASK children how else the sky could look in other pictures.

Look at the sky on the cover. How would you describe the way the sky looks?

Do you think the sky will look exactly like this in every picture in the book? How else might it look?

SET THE PURPOSE: To notice how the sky changes.

Let's read *Picture the Sky* and talk about different ways the sky looks and how it changes.

During

Pause after "It can be a blanket or the curtain rising on your day." INVITE children to describe different pictures of the sky.

Look again at these different pictures of the sky. How would you describe the sky in the first picture [point]?

Yes, here the sky is full of gray clouds. Have you ever seen the sky look this way?

How do you know this is a picture of the sky at night [point]? Yes, it is dark, and we see the moon and stars.

This is a picture of the sunrise early in the morning [point]. Look at the yellow and red light!

Pause after "Sometimes it's movie night." INVITE children to describe more ways the sky could look.

How does the sky look in this picture? Have you ever seen lightening in the sky?

How else could the sky look when it's about to rain?

Pause after "Artists see a masterpiece." DEFINE "masterpiece." 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).

Can you say "masterpiece"? Let's find the syllables or beats in that word: mas-ter-piece. What is a masterpiece?

A masterpiece is a great work of art. When this artist observed the sky, it made her want to paint a wonderful picture of it. She wanted to paint a masterpiece. Let's add "masterpiece" to the list of words we are learning. Do you know any other words that mean the same thing?

After

SUMMARIZE that there are many ways the sky can look. GUIDE children to pretend to paint a picture of the sky, and then describe it to a partner.

There are lots of ways the sky can look. The sky is always changing! Think about some of the sky pictures you observed in this book. Now imagine or "picture" what your sky would look like in your mind...

Your pretend paper is in front of you. Dip your paintbrush into some paint like this [demonstrate]. What colors are you choosing? What objects are in your picture of the sky?

Look at your masterpiece of the sky! Now turn to a partner and describe how it looks!

Children play the game “Count the Clouds and Stars.”

Build Interest

SHOW the marked page in the book *Up, Up, Up!* FOCUS on stars. EXPLAIN that you can see clouds and stars at night.

Look at this page from *Up, Up, Up!* What can you see in the sky at night?

Yes, you can see clouds and stars [point].

SHOW children their cloud drawings from Day 1: Small Group. TELL children they are going to make stars for a game. SHOW the materials (paper choices and drawing tools). INVITE them to choose their materials and then draw a star.

I wonder what it would be like to be up in the sky with the clouds and the stars. For a game we are going to play, we are going to imagine we are clouds and stars. We already made clouds [show cloud drawings]. Now let’s make stars.

Here are some paper choices [point] and some drawing tools [show]. Select what you want to use.

What will your star look like?

CLEAN up the materials.

Build Understanding

MAKE a yarn circle. INVITE children to sit around it.

Let’s all move so we are sitting around this yarn circle [show].

EXPLAIN the game “Count the Clouds and Stars.” CHANT the song below. TAP the corresponding number of children and invite them to walk inside the circle. Then DISCUSS how many children are in the circle in all.

We are going to play “Count the Clouds and Stars.” For this first round of the game, what would you like to be? If you want to be a cloud, hold up your cloud picture like this [demonstrate]. If you want to be a star, hold up your star picture like this [demonstrate]. You can leave your other drawing behind your back.

I’m going to walk around and sing a song about how many clouds and stars I see in the sky. If I tap your shoulder like this [demonstrate], you should stand up and walk inside the yarn circle. Ready?

PLAY the game. CHANT as you tap the corresponding number of children.

Up, up, up, sailing with the clouds, I see THREE CLOUDS [tap three children].
Up, up, up, sailing with the stars, I see TWO STARS [tap two child].

REVIEW the quantity of clouds and stars. ASK children how many there are altogether.

Look at the clouds and stars in the circle! How many clouds do we have? How many stars do we have? How many clouds and stars are in the sky altogether?

Yes, first we added three clouds to the circle. Then we added two stars. That gave us a total of five. When we combined the clouds and stars, we made a bigger number.

Build Experience

ASK children to return to their spots. INVITE them to select the picture they want to hold. CONTINUE to play the game “Count the Clouds and Stars.”

Everyone back to your spot. Now think about which picture you want to hold. Place the other picture behind your back. Let’s keep playing “Count the Clouds and Stars.”

SUMMARIZE combining two numbers.

Today we played the game “Count the Clouds and Stars.” We imagined we were clouds and stars in the night sky. We counted the number of clouds and the number of stars in the circle. Then we combined them to tell how many.

Make & Prepare

- Have the book *Up, Up, Up!* ready. Mark the page that begins “I’d go ballooning to the stars so I could fly…” with a sticky note.

Additional Materials

- Children’s cloud drawings from Day 1: Small Group
- Yarn circle
- Clipboards (one per child)
- Paper choices
- Drawing tools

Build Background Knowledge

Discuss how a star might be depicted (dot, series of lines around a dot, or a star shape). Combine pattern block triangles in a star shape.

Stretch Their Thinking

Invite children to take a turn to tell the number of clouds and stars they see. Can they lead the group through the game?

Listen/Look For

- How do children verbalize their work of combining numbers?
- Can children follow directions?

Growing STEM Skills

Children might (and probably will!) ask you STEM related questions you may not know the answer to. Model how everyone is a learner! Ask them, “How can we find out?” Show them how you use books and online resources to find out answers. Work together to set up an experiment to find out the answer to a question. Reach out to an expert in the field to find out the answer.

4 Gathering Times

Science, Creative Arts

Greeting Time

Children use sky cards to answer clues.

Science: Earth and Space Sciences

DISTRIBUTE sky cards. HOLD on to the lightning card. ASSESS that all children know their object.

Do you know what object is on your card? Sign "yes" [demonstrate] if you do. Or show it to a neighbor for help.

STATE that you will say a clue about one of the objects.

Today let's play a riddle game. I'm going to say some clues about something we can observe in the sky. If the object on your sky card answers the clues, you will come to the middle of the circle.

MODEL with clues about lightning. INVITE children to "zig zag" to the middle if they have a lightning card.

Listen carefully to the riddle [point to ear]. I'm thinking of something in the sky. When it rains, you might see it light up. It is white or yellow. It often looks like a zig zag line. You can see it when you hear thunder.

Look at your sky card. Do you have the answer to the riddle?

Yes, lightning sometimes happens during rain storms. If you have lightning on your card too, let's zig zag [demonstrate] to the middle and greet each other.

REPEAT with additional clues (shines light during the day, drops rain down to the earth, twinkles in the night sky, shows all the colors, etc.) INVITE children to suggest clues, too.

Make & Prepare

- Review the ASL sign for "yes" on the *Blueprint* website.

Additional Materials

- Sky cards

Keep It Going

- Search "NASA for Kids" or use this link: https://www.nasa.gov/kidsclub/index.html to explore the NASA website intended for children. There's a wealth of information – photographs and videos, for example – to explore.

Movement Time

Children practice lightning pose.

Creative Arts: Creative Movement and Dance

SHOW a lightning card. REFER to the lightning page in the book *Blueprint Yoga*.

One thing we may observe in the sky is lightning [show card]. Who had a lightning card during Greeting Time?

Let's look at the lightning page in our yoga book. What do you notice?

Yes, a lightning bolt looks like a bright zigzag line.

MODEL lightning pose. GUIDE children to practice the pose on each side.

Watch as I practice lightning pose. I start standing with one foot forward and one foot back. First, I bend my front knee and bring my back knee to the ground. Next, I reach one arm along my body and the other arm up past my ear. Do look like a zig zag lightning bolt?

Now it's your turn to practice lightning pose. Stand with one foot forward and the other foot back. Bend your front knee, and bring your back knee to the ground. Reach one arm along your body and the other arm past your ear. Do you feel like a lightning bolt in the sky?

Come back up to stand and switch legs!

Make & Prepare

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

Additional Materials

- A lightning card
- *Blueprint Yoga*

Talk Time

Children launch the unit project.

Science: Earth and Space Sciences

INTRODUCE the role of a "meteorologist." ADD the word to the Unit Chart: "Words We Are Learning." INVITE children to share words that mean the same thing (in English or their home language).

Have you ever seen lightning? When?

Yes, lightning may occur during a rainstorm. But how do we know when to expect a rainstorm? How do we know what kind of weather to expect?

A person whose job it is to observe the sky and tell us about the weather is called a meteorologist. Let's say that long word together: meteorologist. Have you ever seen or heard a meteorologist talking about the weather?

Here is a photo of a meteorologist in our local community [give name and show photo]. Let's add "meteorologist" to the list of words we are learning. Do you know any other words that mean the same thing?

LAUNCH the Unit Project: Weather Data.

How would you like to observe and learn about weather like a meteorologist? Each day we are going to observe the sky and talk about the weather. Then we can track our observations on this chart.

What is the weather today? How should we show that on our chart? Who would like to write it?

Make & Prepare

- Launch the Unit Project. Create a chart on which children can track the weather they observe each day. Collect the data throughout the unit. You will analyze and discuss the results on Day 19: Talk Time.
- Print a photo (or cue a video) of a meteorologist in your local community.

Additional Material

- Unit Chart: "Words We Are Learning"

Words We Are Learning

meteorologist: someone who observes the sky and talks about the weather

Classroom Jobs

Do you have a classroom job for someone to report on the weather? Do you call that person a "meteorologist?"

Reflection Time | Can you tell us about a masterpiece you created?

Children learn the word “masterpiece.”

Before

CONNECT to the book *Picture the Sky*. FOCUS on the word “masterpiece.” POINT to the word on the Unit Chart: “Words We Are Learning.”

We are talking about the sky. The sky is all around us, and it can change. Sometimes, when people look up at the sky, they want to paint what they see.

In the book *Picture the Sky* [show] the author uses the word “masterpiece” [point to the word on the chart] to describe a painting of the sky. Say that with me: masterpiece. Let’s count the beats: mas-ter-piece [touch head, shoulders, knees]. How many beats is that?

SHOW and READ the marked page in the book. INVITE children to make the “I hear” sign when they hear the word “masterpiece.”

Look at the picture and listen for the word “masterpiece” as I read. Make the “I hear” sign [demonstrate] when you hear the word “masterpiece.”

ASK children to say if they think the artist has created a masterpiece.

A masterpiece is a great work of art, a painting that shows great skill! Who can come up and point to the artist’s masterpiece? Do you think this artist has painted a masterpiece? Why?

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

During

DRAW an easel and paint. DESCRIBE what you are thinking and drawing. INVITE children to contribute.

I am drawing an easel with a canvas on it, paint, and tools that artists use. What other tool might I draw?

Suggested message: “You can paint a masterpiece.”

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

I want to write the word that describes a painting that shows great skill. What word do I want to use [encourage children to recall the word “masterpiece”]? Yes, “masterpiece” is another word for a great work of art.

INVITE children to reread the message with you.

After

INVITE a volunteer to find the word “masterpiece” 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 “masterpiece” in the message? How do you know that is the word “masterpiece?” What does it mean?

SHOW children several examples of works of art that are generally considered masterpieces. INVITE children to notice qualities of the art that are interesting to them.

Looking at the sky inspires some artists to paint. Let’s look at some paintings some people think are masterpieces. They are painted by different artists and show the sky in different ways. I wonder what you will find interesting about these paintings.

- What kinds of lines do you see? Shapes? Color?
- Why do you think this is considered a masterpiece?

REVIEW the meaning of the word “masterpiece” again.

Today we learned the word “masterpiece.” We looked at paintings that some people consider masterpieces. A masterpiece is a great work of art!

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 “masterpiece” means? Let’s rehearse what you might say and do. Tell your partner what a masterpiece is.

Make & Prepare

- Have the book *Picture the Sky* ready. Mark the page that begins “Artists see a masterpiece,” with a sticky note.
- Download and print examples of sky paintings (see suggestions below). Include any local artists or art that is relevant to your specific group of children. For example:
  - Hiroshige’s “Sudden Shower Over Shin-Ohashi Bridge and Atake”
  - Vincent van Gogh’s “The Starry Night”
  - “The Puszta” by Karoly, the Elder Marko

Family Engagement

Encourage children and families to use the word “masterpiece” at home. Print the Building Vocabulary: “Masterpiece” card from the *Blueprint* website.

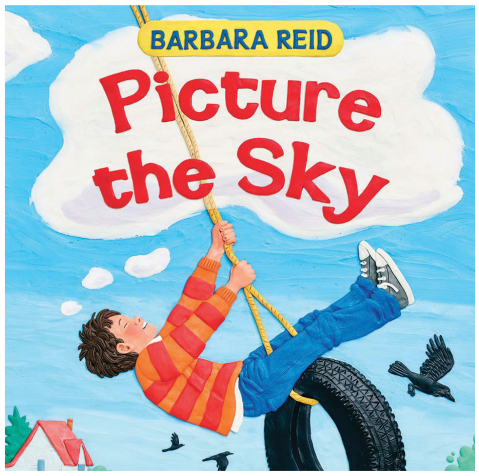
Keep It Going

- While walking through the school, invite children to look at the artwork hanging up in the hallways. Which ones do children think are masterpieces? Why do they think it is a masterpiece? Encourage them to use the word “masterpiece” when describing the artwork.
- While reading with children in the library center, encourage children to look closely at the illustrations or pictures in the book that you are reading. Which ones do they think are masterpieces? Why?

4 Intentional Read Aloud

Science: Earth and Space Science

Children discuss what information we get from the sky.



Materials

- Unit Chart: "Words We Are Learning"
- Unit Chart: "What Happens in the Sky?"

Words We Are Learning

background: what is behind the objects in a picture or scene

Select Your Focus

In this lesson, you may choose to focus on the types of weather most typical to your area. Draw on children's knowledge of and experiences with these kinds of weather. You may also take this opportunity to expose children to other types of weather that they may not experience.

Supporting Individual Children

Distribute props to children who need more support staying engaged during read alouds For example, give a child a sun prop. When they see the sun in an illustration in the book, they can hold up their prop for the group to see. You can do this with other books as well using specific characters or objects that appear frequently in the illustrations.

Keep It Going

- Practice observing the sky with children on a regular basis. Make connections between the weather and our daily lives explicit. For example, "Those gray clouds make me think that it may rain today. I'm glad I wore my rain boots."

Before

DISCUSS what information we get from observing the sky. FOCUS on how the sky tells us the weather.

Just like meteorologists [point to the Unit Chart: "Words We Are Learning"], we can observe the sky. Why do people observe the sky? What information can we learn from the sky?

One thing the sky can tell us is the weather. Why is it important to know the weather?

Yes, because people need to wear different clothes in different types of weather. Often people choose to do different activities depending on the weather.

SET THE FOCUS: To notice what information people get from the sky.

As we reread *Picture the Sky* today, notice what information people get from the sky.

During

Pause after "It can slip into the background." DEFINE "background." 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 do you notice about the sky in this picture? Yes, in this picture we can only see the sky in the background. Can you say "background"? Let's find the syllables or beats in that word: back-ground. What does it mean that sky is in the background?

The background is what is in the back or behind what you are looking at in a picture or scene. It looks like the sky is behind the buildings in this community. It's in the background. Let's add "background" to the list of words we are learning. Do you know any other words that mean the same thing?

Even though the sky is in the background, what information can we still get by looking at it? What kind of weather do you think it is? How can you tell?

Pause after "…or a weather report." DISCUSS why the farmer and the campers could be looking at the sky.

What is this person doing [point]? Yes, it looks like she is a planting a garden. She must be a farmer or a gardener. I wonder why she is looking up at the sky? Why is the weather important to her?

Yes, her plants need both sunlight and rain water to grow. The weather is important!

How about these people camping [point]? Why might they be looking at the sky?

Yes, the weather is important to them. It looks like they are staying dry inside their tent while it's raining outside.

Pause after "Can you?" CLARIFY the way the word "read" is used here.

How can you "read" the sky? When we look up, the sky gives us information. Just like we can read a book to learn information, it's like we can "read" the sky. That's what meteorologists do, and we can too!

Pause after "Sometimes it's movie night." DISCUSS why the family is watching the storm from inside.

What are these family members doing? Yes, they are watching the sky like a movie! How can you describe this picture of the sky? Yes, it is dark, and there are lots of gray clouds. There is even a lightning bolt flashing!

Why do you think the family members watching the thunderstorm from inside their home? Yes, inside their sturdy home they are staying dry and safe. So, the weather helps the family members decide what to do.

After

INVITE children to turn and talk about what they are learning about the sky. Then INVITE them to add to the Unit Chart: "What Happens in the Sky?"

The sky can give us lots of information, especially about the weather. What can we learn by looking at the sky? Turn and tell a partner!

Let's add what we are learning to our Unit Chart: "What Happens in the Sky?"

Children play a variation of “Roll, Count, Combine.”

Build Interest

SHOW examples of the star cards. INVITE children to investigate them. REFER to the Unit Chart: “We Can Describe.”

We are talking about what we see in the sky. Look at these stars [point]. You might see stars in the night sky. What do you notice about the shape of the stars?

COLLECT the materials.

Build Understanding

REVIEW the game “Roll, Count, Combine.”

We are going to play “Roll, Count, Combine” again. We already played this game using cotton balls [point]. But today we are going to play with cotton balls and stars. Each of you will take a turn to roll the dice [show] and count out either cotton balls or stars. We will take turns! Then you place them on the blue sky mat [show]. What do you notice about the mat?

Yes, it has a line going across it. Be sure to place your cotton balls or stars on that line. Then we will figure out how many we have altogether! Ready?

WORK TOGETHER to play “Roll, Count, Combine.” INVITE a child to be your partner. TAKE TURNS rolling the dice and counting out cotton balls or stars. Then COMBINE the quantity and DESCRIBE what you are doing.

I will roll a die first. I rolled a three. Now I will count out three cotton balls and place them on this line on the blue sky mat.

Who would like to go now? Roll a die, count out stars, and place them on the line on the mat.

Now that we have both rolled and counted out cotton balls and stars, how can we figure out how many we have altogether?

Build Experience

DISTRIBUTE bowls of cotton balls, bowls of stars, dice, and blue paper mats. INVITE children to work in partnerships to play “Roll, Count, Combine.” INVITE children who speak the same home language to play with each other in their home language to solidify and extend their learning.

Now it is your turn to work with a partner to play “Roll, Count, Combine.” Here are your cotton balls, stars, a die, and a blue paper mat. The first person to roll counts out cotton balls. The second person counts out stars. Be sure to place them on the line. Then try to answer the question: how many cotton balls and stars do we have altogether?

INVITE children to switch roles. Then REVIEW the game. INVITE children to share how they worked.

Today we played the game “Roll, Count, Combine” with cotton balls and stars. Who would like to share what happened as they played the game?

Make & Prepare

- Download and print star cards (six stars per partnership).

Additional Materials

- Anchor Chart: “We Can Describe”
- Dice (one die per partnership)
- Blue piece of construction paper with horizontal line (one per partnership)
- Cotton balls (six per partnership)

Build Background Knowledge

Play a variation of “Count the Clouds” (with clouds, clouds and stars, or just stars). Ask children how they would like to play the game.

Stretch Their Thinking

Show children how to write the addition sentence for the combination of cotton balls and stars.

Listen/Look For

- What strategies do children use to find the total number of objects?
- How do children explain their thinking?

Growing Mathematicians

Using your fingers to count? Researchers say yes! Evidence from neuroscience studies shows that fingers are probably one of children’s most powerful math tools. They help children perceive and visualize quantities (think “seeing” the number five with your fingers in your head). This skill is important in building number sense and counting. Children begin to make abstract math more understandable by using concrete objects. Fingers are a built-in counting tool! This relates to the math practice of using appropriate tools strategically, one of the key practices in learning and doing math.

5 Gathering Times

Literacy, Creative Arts

Greeting Time

Children identify letters in the word on their sky card.

Literacy: Phonological Awareness

DISTRIBUTE sky cards. HOLD onto a moon card. ASSESS that all children know their object.

Do you know what object is on your card? Sign "yes" [demonstrate] if you do. Or show it to a neighbor for help.

FOCUS on the first letter of the objects.

Just like there can be different objects in the sky, words begin with different letters. Look at the word on your sky card. Put your finger on the first letter of the word on your card like this [demonstrate]. What letter is it?

I'm going to say a letter. If your object begins with that letter, come to the middle of the circle.

MODEL with the *letter m* and the moon card. INVITE children to "float" to the middle if their word begins with the *letter m*.

Let's practice together. Does your word begin with the *letter m*?

Yes, I have a moon on my card. The word "moon" begins the *letter m*. Does your word also begin with the *letter m*? Let's float like hot air balloons to the middle and greet each other.

REPEAT with additional letters (such as *r, s, l, b,* etc.) INVITE children to suggest letters, too.

Movement Time

Children practice moon pose.

Creative Arts: Creative Movement and Dance

SHOW a moon card. REFER to the moon page in the book *Blueprint Yoga.*

One thing we may observe in the sky is the moon [show]. Who had a moon card in Greeting Time?

Let's look at the moon page in our yoga book. What do you notice?

Yes, the moon can look different ways. Sometimes it is round and full. Other times we see only part of the moon. One shape the moon can have is this crescent shape. It looks kind of like a banana!

MODEL moon pose. GUIDE children to practice the pose on each side.

Watch as I practice moon pose. I start standing with my feet close together. First, I reach both arms straight up and connect my hands. Next, I lean my upper body over to one side. Then I press my hips over to the other side. Do I look like a crescent moon?

Now it is your turn to practice moon pose. Stand with your feet close together. Reach both your arms up and connect your hands. Lean your upper body over to this side [point]. Press your hips over to that side. Take three deep breaths. Do you feel like a crescent moon?

Come back up to stand, and try leaning the other way!

Talk Time

Children launch the weather station dramatic play center.

Creative Arts: Dramatic and Performance Art

REFER to "meteorologist" on the Unit Chart: "Words We Are Learning." SHOW photo of a weather station.

It's fun to pose like objects we can observe in the sky. Observing the sky is something that meteorologists like [give name and show photo] do at their job. Some meteorologists tell us about the weather from their weather stations like this [show photo].

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

We can be meteorologists! How would you like to create a weather station at our dramatic play center?

- What should we call it?
- What are some items we might need to create a weather station 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?
- How might you work with each other?

I can't wait to see all of you meteorologists at work in your weather station!

Materials

- Sky cards

Alphabetic Principle

Letters and corresponding sounds are the basic building blocks of the English language. Children who master the "alphabetic principle," or the understanding that printed words consist of letters that can be linked to sounds, have achieved an important first step in learning to read and write.

Make & Prepare

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

Additional Materials

- A moon card
- *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.

Make & Prepare

- Make space for the new weather station dramatic play center. Collect some items to launch it but leave room for children to co-design it. See Centers: "Dramatic Play" (page 17) for suggestions.
- Download and print images of a weather station.

Additional Materials

- Photo of local meteorologist
- Unit Chart: "Words We Are Learning"

Reflection Time | Why do we observe the sky?

Children listen to sounds in the sky and describe what they hear.

Before

CONNECT to using the power of observation. EXPLAIN that our sense of hearing can help us learn about the world.

We've been using the power of observation to look for different things in pictures. Our eyes [point] are so powerful, they can help us see and learn about the world around us. We have another sense that helps us discover things about our world: our sense of hearing. Our ears [point] help us hear and learn about the world, too!

Today we are going to use our ears to listen carefully to some sounds. Our sense of hearing will help us name what we hear in the sky.

INVITE children to close their eyes. PLAY the audio clip of an airplane.

If you would like, you can close your eyes. I'm going to play a sound. Use your sense of hearing to focus on the sound. Then we will name what we hear.

ASK children to name what they heard.

What did you hear in the sky? Yes! An airplane. Watch as I write about that today.

During

DRAW a picture of an airplane. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is a plane. How many windows should I draw?

Suggested message: "I hear a plane in the sky."

PAUSE to focus on concepts of print (letters make up words).

In. I want to write the word "in." The word "in" has two letters: i and n. I write these letters together to make the word "in." Then I leave a finger space and begin the next word, "the." After I write "the," let's count the letters in that word.

Finish writing the message. INVITE children to reread the message with you.

After

CONTINUE playing sounds. INVITE children to close their eyes and focus on the sound.

Let's keep using our sense of hearing to help us identify what's in the sky. I'll play some more sounds. Close your eyes and focus on what you hear. When you think you know what it is, open your eyes and whisper what you heard into your hand.

Let's share [give children time to share]. What did you hear? How did you know?

REREAD the message one more time.

[Transition] INVITE children to share what else they want to hear.

We listened to several things that you hear in the sky. What else would you like to hear the sounds of?

Make & Prepare

- Cue up audio clips of things you hear in the sky on the *Blueprint* website.

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.

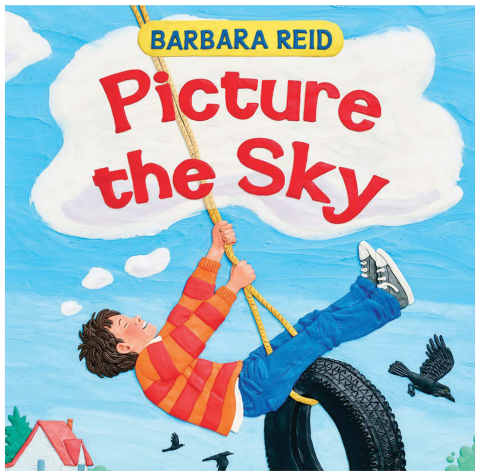
Keep It Going

- While on the playground, encourage children to listen closely for noises coming from the sky. Are there any planes or helicopters flying by? What other sounds do children hear (not originating from the sky)? Maybe a dog or a loud car?
- Gather children in a small group. Play audio clips of sounds that do and do not occur in the sky (e.g. car horn, dog barking). Have children identify the sounds from the sky.

5 Intentional Read Aloud

Literacy: Comprehension

Children think about how people feel.



Materials

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

Executive Function

Encouraging children to consider other perspectives helps them develop flexible thinking.

Diversity and Inclusion

This book shows that community members can be differently-abled (for example, using a walker). If there are differently-abled children in your class, empower them to see themselves reflected in the books you read. You may also use this as an opportunity to affirm all types of diversity and inclusion in your classroom community, your local community, and beyond.

Scaffolding Children

In this lesson, we give children the chance to talk to a partner before sharing. This scaffold's children learning by giving them time to process what they are learning and rehearse what they might say to the group.

Before

CONNECT how the sky changes to how people's feelings change. USE Sayeh or Elijah, the social emotional puppets, to talk. REFER to the Anchor Chart: "Feelings." INVITE children to identify how they feel.

We look at the sky to learn more about it. There are many different ways the sky can look. The sky is always changing!

Sayeh: I was thinking. Just like the sky can look different ways, we can have different feelings too. How are you feeling right now? Lean and tell a partner. You can use the Anchor Chart: "Feelings" to help you.

Do you always feel the same way? No, just as the sky changes, our feelings change, too.

CONNECT to Power of 3. EXPLAIN how we can use the power of observation to think about how others feel.

One way we can take care of each other is by thinking about how others feel. That's part of our Power of 3. But if someone does not tell you how they are feeling, how can you find out how they are feeling?

Yes, we can observe a person's face and body to see if they are showing how they feel. For example, if you see this expression on my face [smile], how do you think I feel?

We can use our power of observation to think about how others feel!

SET THE FOCUS: To think about how people in the book could be feeling.

As we reread *Picture the Sky*, let's think about how the people in this book are feeling. We can observe their faces and their bodies.

During

Pause after "You can find it up, down, or all around." DISCUSS how the man might be feeling.

Take a closer look at these family members on the Ferris wheel. The children seem to be having fun. But look at the man's expression [point]. How do you think he is feeling? Why?

Yes, his eyes are closed, and he is frowning. He is holding on tight to the bar. He may be feeling scared or nervous. Have you ever felt scared or nervous?

Pause after "You can watch the passing parade." DISCUSS how the children might be feeling.

These friends are watching the different shaped clouds in the sky. How do you think they feel? Why?

Yes, they are relaxing in a hammock outside. They look calm and happy.

Pause after "There may be a sky in your mind's eye." DISCUSS the crying child's feelings.

This picture shows different people thinking about their feelings. Look at their thought bubbles [point]! Each person is picturing a different sky that shows how they feel.

What do we know about how this child is feeling [point]? How can you tell?

Yes, his ice cream fell down. He looks upset.

Why do you think he is imagining this kind of weather? Yes, maybe the raindrops remind him of crying.

After

LINGER on the last page. ASK how the boy in the picture is feeling. INVITE children to turn and talk about a time they felt similarly. INVITE children who speak the same language to share with each other in their home language to solidify and extend their learning.

Just like we observe the sky to learn about it, we can observe other people to learn how they are feeling.

- How do you think this child is feeling? How can you tell?
- Have you ever felt that way?

Turn and talk with a partner about a time when you felt the same way.

Children create a rain stick.

Build Interest

SHOW the image on the marked page from *Picture the Sky*. ASK children where rain comes from and what it might sound like.

Look at this picture from our book, *Picture the Sky* [point to the picture of the rain]. What is happening in the sky? Yes, it is raining.

What do you know about the sound of rain?

PLAY an audio clip of rain. INVITE children to close their eyes and listen. SUMMARIZE how children describe the rain.

Let's listen [point to ears] to some rain falling. If you would like, close your eyes to focus on listening. What do you hear? What are you "picturing" in your mind?

I heard you describe rain…

Build Understanding

INVITE children to view and gently touch the filler materials you have prepared in bowls. ASK them to describe any sound they hear.

I wonder if any of these materials [point] make a sound like the rain. Want to try? Take turns gently placing your hand in the bowl [demonstrate]. You can carefully lift and drop a few of the materials [demonstrate]. What sound do you hear?

READ the directions for making a rain stick and discuss. SHOW children the variety of containers. WORK TOGETHER to make one rain stick.

We are going to use these filler materials [point] and add them to one of these containers [point] to make a rain stick, a stick that makes the sound of rain. Will you help me make one and then you can make one yourself?

First, pick a container. Next add the filler you have chosen. Finally, let's add some twigs and seal the end. Now we have a rain stick! I wonder what sound it will make?

SHAKE the container in different ways.

Who wants to gently move the rain stick? What do you hear? Slowly turn it over. What happens?

Build Experience

GIVE children time to choose a container and filler material to create a rain stick. INVITE children to describe what they are doing and why. USE what you know about each child's language skills to include and extend their participation.

It's your turn to fill containers to make a rain stick!

- Gesture: Point to the container you want to use. Point to the materials you want to add. Thumbs up/down: Do you think it will make a [loud, soft, hissing, thumping] sound?
- Yes/No: Will you chose this [container]? Will you fill it with this [material]? Do you think it will make a [loud, soft, etc.] sound?
- Either/Or: Will you choose this [container] or this [container]? Will you fill it with this [material] or this [material]? Do you think it will make a [loud, soft, etc.] sound or a [hissing, thumping, etc] sound?
- Open-ended: What sound do you imagine that material might make? Why? Will you fill your container with more than one material? Why?

USE the rain sticks to make sounds.

Today we made rain sticks. Let's share:

Gently shake your rain stick. How would you describe the sound it makes? Compare your rain stick to other rain sticks. What do you notice?

Make & Prepare

- Chart the directions for making a rain stick (see below). Add supporting pictures.
- A variety of containers (plastic bottles with lids are easiest because they do not need to be taped shut, but you can also use cardboard tubes)
- Bowls of filler materials (such as beads, sand, pebbles, seeds, etc.)
- Small twigs help to slow the filler materials down as they move inside the container.
- Have the book *Picture the Sky* ready. Mark the page that begins "You may find a story in the sky…" with a sticky note.
- Cue the audio recording of rain on the *Blueprint* website.
- Chart the directions.

Additional Materials

- Tray
- Spoons
- Funnels

Remember to Save

- These rain sticks will be used in Greeting Time on Days 6 through 10.

Rain Stick Directions

1. Pick a container.
2. Add filler.
3. Add twigs.
4. Seal

Making Rain Sticks

Invite creativity and open-ended exploration during this activity by having a variety of materials available for children to use.

Build Background Knowledge

Share stories of listening to or playing in the rain.

Stretch the Thinking

Ask children to think about other instruments they can make to mimic the sounds of nature.

Listen/Look For

- What do children notice as they explore the materials?
- What choices do they make as they select objects and filler for their rain stick? Why?

Supporting Individual Children

Activities with multiple steps can be overwhelming for some children. If that is the case, make the activity simpler by reducing the number of items you have out and by focusing on one step at a time.

UNIT 9

WEEK 2

Be Sure To…

- ☐ Support children's observation skills by describing and comparing different clouds.
- ☐ Help children realize how important rain is for taking care of plants and animals.
- ☐ Begin a class book on what children know about the sky or a part of the sky.

Materials

- Photo of local meteorologist
- Food coloring
- Magazines or brochures that features sky pictures that children can cut out
- Hair comb
- Items that keep you dry in the rain, such as rain coat, umbrella, and rain boots

Books

- *Up, Up, Up!*
- *Picture the Sky*
- *Clouds*
- *Rain*

Charts

- Anchor Charts:
  - "Readers Can Say"
  - "We Can Describe"
  - "Power of 3"
  - "Feelings"
- Unit Charts:
  - "Words We Are Learning"
  - "What Happens in the Sky?"
  - "5 Senses" (Unit 2)

What is special about clouds and rain?

Clouds come in all different colors, sizes, and shapes. Clouds are made of water. When they get full, rain falls down. Living things need water to survive.

Children turn their attention to clouds, rain, and water. They learn vocabulary for describing different types of clouds and explore how rain affects living things and the environment. They use rain sticks and make the sounds of rain storm with their bodies. They also do multiple hands-on investigations with water to better understand its properties.

Keep in Mind

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 and sounds and also begin forming letters in their own writing. In addition, it will support children as they learn numerals and form numerals in their own writing.

Words We Are Learning

wispy
light and floaty

breeze
gentle wind

gust
strong wind

cracked
showing lines from splitting without coming apart

gravity
it pulls things toward the ground

gushed
flowed or poured out quickly

Multilingual Learner Anchor Words

- cloud
- rain
- water
- fall

Trips & Visitors

Reach out to local radio or television meteorologists. Invite them to your classroom.

From the Songbook

"The Umbrella"
Copy the poem and send home to families.

Encourage children to recite the poem together and to create movements to go along with it.

Ask children to think of other examples of rain gear they can substitute in the poem. Rain boots? Rain coat?

Invite children to change their expression as they recite the poem. Can they use a whisper voice? A dramatic voice?

Working with Families

Send this tip home via text or email:

Children are learning about clouds and rain. But water is everywhere! Go on a treasure hunt for water in your own home. Where in your house do you see water? Where does it come from? How is it used?

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 move rain sticks in different ways. *Creative Arts: Music*	Children move rain sticks to signal words that rhyme. *Literacy: Phonological Awareness*	Children move rain sticks to signal words that begin with /r/. *Literacy: Phonological Awareness*	Children use rain sticks to blend words. *Literacy: Phonological Awareness*	Children tap their rain sticks to match a numeral. *Math: Numbers and Number Sense*
Movement Time	Children blow a cotton ball off their hands. *Physical Development: Fine Motor Skills*	Children blow a cotton ball to a partner. *Physical Development: Fine Motor Skills*	Children use different kinds of breath to blow cotton balls. *Physical Development: Fine Motor Skills*	Children stretch out cotton balls and blow them. *Physical Development: Fine Motor Skills*	Children try to blow cotton balls into a target. *Physical Development: Fine Motor Skills*
Talk Time	Children discuss what they know and wonder about clouds and rain. *Science: Earth and Space Sciences*	Children set up an investigation to see if water changes. *Science: Scientific Inquiry and Practices*	Children create sounds of a rainstorm with their hands. *Creative Arts: Music*	Children practice "Raindrops." *Social Emotional: Self-Awareness and Self-Concept*	Children think about how others feel using puppets. *Social Emotional: Social Awareness and Relationships*
Message Time Plus	Children discuss water and name places they see it. *Science: Earth and Space Sciences*	Children imagine what clouds look like. *Science: Earth and Space Sciences*	Children begin work on a class book. *Literacy: Writing*	Children select appropriate clothing for a rainy day. *Science: Earth and Space Sciences*	Children learn about gravity. *Science: Physical Sciences*
Intentional Read Aloud	Children learn words to describe different clouds. *Literacy: Vocabulary*	Children share what they wonder about clouds. *Literacy: Comprehension*	Children identify the senses the animals use to observe the rain. *Science: Scientific Inquiry and Practices*	Children discuss how rain helps plants and animals. *Science: Earth and Space Sciences*	Children join in reading repeating words and phrases. *Literacy: Fluency*
Small Group	Children solve a problem: how to fix a hole in a cup. *Approaches to Learning: Initiative and Curiosity*	Children explore the shape of clouds using shaving cream. *Science: Earth and Space Sciences*	Children explore how water droplets interact with each other. *Science: Earth and Space Sciences*	Children fill a sponge with water until it releases water. *Science: Earth and Space Sciences*	Children investigate materials to determine which are absorbent. *Science: Physical Sciences*
Reflection Time	What are you learning about clouds?	Do you wish it rained/ didn't rain today? Why?	Where did you see water today? How did you use it?	Which of your senses tells you the most about the weather? Why?	What is special about clouds and rain?

Centers to Launch

See Pages **14-23**

Art Center | Cloud Painting

Sensory Table | Rainfall

Sensory Table | Sink or Float?

Writing Center | Cloud Letters

6 Gathering Times

Creative Arts, Physical Development, Science

Greeting Time

Children move rain sticks in different ways.

Creative Arts: Music

ASK children what senses they use to observe the rain.

We can use different senses to learn about the sky. When it's raining, what senses can you use to observe the rain?

Yes, you can see it, smell it, feel it, and hear it.

Let's make some pretend rain sounds with the rain sticks that we made!

DISTRIBUTE rain sticks. MODEL and GUIDE children to shake their rain sticks

Can you shake your rain stick quickly like this [demonstrate]? Listen to the sound…

MODEL and GUIDE children to turn them over slowly. DISCUSS how the sounds are different.

Now turn your rain stick over slowly like this [demonstrate]. How is the sound different?

Can you make another kind of sound with your rain stick? How?

COLLECT the rain sticks.

Movement Time

Children blow a cotton ball off their hands.

Physical Development: Fine Motor Skills

REFER to cloud images in *Up, Up, Up!* and *Picture the Sky*. If possible, INVITE children to look at clouds outside.

Real rain falls from clouds. We saw pictures of clouds in our sky books *Up, Up, Up!* and *Picture the Sky* [show]. Let's look outside. Do you see any clouds? What do you notice?

Yes, sometimes clouds look white and fluffy like a cotton ball [show]. The wind moves them across the sky.

ASK children how we could move the cotton balls with our breath. MODEL and INVITE children to blow air out of their mouths.

Pretend these cotton balls are clouds and our breath is the wind. How could we move the cotton balls with our breath?

Yes, we can blow on them by pushing air out of our mouths like this. You try it.

PLACE a cotton ball in one child's hand. GUIDE them to blow it slowly off their hand.

Who wants to show us how to gently use our breath to blow a cotton ball off our hand?

[Name], please stand. Imagine your breath is the wind and your cotton ball is a cloud. Take a deep breath in through your nose, and then blow the air slowly out of your mouth.

PLACE a cotton ball in each child's hand. ENCOURAGE them to try it.

COLLECT the cotton balls.

Talk Time

Children discuss what they know and wonder about clouds and rain.

Science: Earth and Space Sciences

DISCUSS what children know and wonder about clouds and rain. USE a few examples from the suggestions below. ADD children's ideas to the Unit Chart: "What Happens in the Sky?"

We pretended that cotton balls were clouds blowing in the wind. Let's think more about real clouds in the sky.

- What do you know about clouds?
- What do you want to learn about clouds?
- What do you wonder about them?
- Rain falls from clouds. What do you know about rain?
- Why does it rain?
- Why do you think rain is important?
- What else do you want to know about rain?
- What do you wonder?

Just like meteorologists [give name and show photo], we are thinking and talking about what happens in the sky!

Materials

- Bring children's rain sticks from Day 5: Small Group. Have extras if needed.

Differentiated Instruction

Using rain sticks is an activity designed for auditory learners. Other ways you can support these types of learners include reading aloud, singing to learn new skills, and varying the pitch and tone of your voice (or a puppet's voice).

Make & Prepare

- Have one cotton ball for yourself and one for each child.

Additional Materials

- The books *Up, Up, Up!* and *Picture the Sky*

Connection to Other Units

In Unit 4 children did similar breath work. When we read *The Three Little Pigs,* we used the Wolf's breath to blow pom-poms in different ways. Now instead of imitating a character from a book, we are imitating wind in nature moving clouds in the sky.

Materials

- Unit Chart: "What Happens in the Sky?"
- Photo of local meteorologist

Supporting Multilingual Learners

Explicitly teach the words "cloud" and "rain" for new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (using an online translation tool). This will support their comprehension of the thematic content.

Reflection Time | What are you learning about clouds?

Children discuss water and name places they see it.

Before

CONNECT to learning about clouds and rain. REFER to the Unit Chart: "What Happens in the Sky?" INVITE children to turn and talk with a partner about where they see water outside.

We know a lot about rain and clouds [refer to chart]. We know that rain is water. It falls from the clouds. I wonder…where else do you see water when you are outside? Take some time to think about it. When you are ready, turn and talk to a partner. ell them where you see water when you are outside. Then we will share.

EXPLAIN that you are going to work together to make a list of their ideas.

Let's make a list of all our ideas! In the message today, I'll write the title: "Where Do We See Water Outside?" Then we will work together to make a list of all the places we see water outside.

During

[Draw and write on chart paper.]

DRAW a picture of a rain cloud. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is a picture of a rain cloud. We see water in the form of rain falling from the cloud. How many raindrops should I draw?

Suggested title: "Where Do We See Water Outside?"

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

I am going to write, "Where Do We See Water Outside?" Help me count how many words I am going to write [count and hold up one finger for each word]. Six words! I am ready to write.

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

After

ENGAGE children in interactive writing. COLLABORATE with children to list where they see water in their environment. INVITE a few children to the board. GUIDE them as they contribute to the writing (e.g. letters or words).

We just put thought about and shared where we see water in our outside environment. We said we see water in puddles. Who wants to come up and write the first letter in the word "puddles"?

What sound do you hear in the beginning of the word "puddle?" Yes, /p/.

What letter makes that sound? The *letter p*.

Where will you write the letter?

What does the lowercase *letter p* look like? Yes, make a tail and bump out.

ENGAGE the rest of the group by inviting them to write the letter in the palm of their hand.

Everyone, please use your pointer finger [hold up] to write the lowercase *letter p* in your hand!

CONTINUE listing children's ideas. Then SUMMARIZE the discussion and ideas children generated.

Today we thought about how rain is water that falls from the clouds. But we see water in lots of places. We see it…

REREAD the message one more time.

[Transition] INVITE children to chant the rhyme "rain, rain, go away, come again another day."

Sometimes, when it is raining and we want to go outside, we say a little rhyme, "Rain, rain, go away, come again another day." Let's sing that now.

Note: The message should be written on chart paper.

Material

- Unit Chart: "What Happens in the Sky?"

Responding to Children

Do some children in your class need extra prompting to share? Offer choices in a "silly" way. For example, you can ask, "Do you see water in your bed or the bathtub?"

Supporting Multilingual Learners

Explicitly teach the words "water" and "fall" for new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (using an online translation tool). This will support their comprehension of the thematic content.

Remember…

Use the Interactive Writing experience to model concepts of print, model stretching and spelling words, and supporting the rereading of text.

Interactive Writing

Emphasize initial letter-sound relationships. Predetermine which children you will call up to write which letters. For example, you may have a child whose name begins with the *letter p* write the *letter p* in "puddles." Remember to engage all children by sound stretching a few times. For example, say, "/p/ -- puddles." What letter makes the sound /p/? The *letter p* makes the sound /p/ for the beginning of the word "puddles."

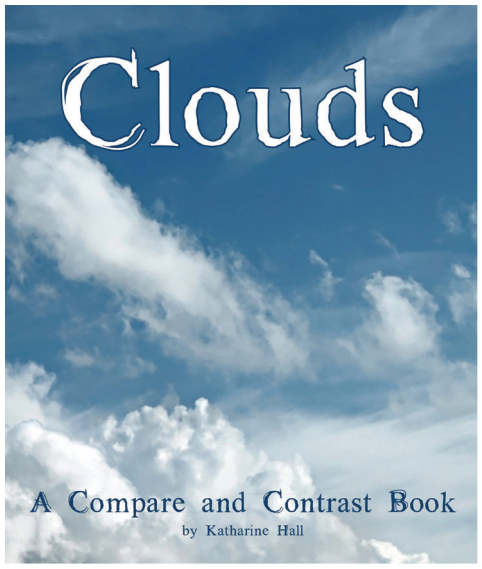
Keep It Going

- During snack, talk with children about water. Give each child some water. What does it taste like? How does water help them? What do they use water for ((e.g. to drink, to bathe, to cook, to play)? How does water change (e.g. it can freeze; it can become a gas like steam from boiling water)?
- Is it raining? Or is rain forecasted? Together talk with children about how much rain actually falls from the sky. Put a bucket outside. Do the children think the rainfall will fill the entire bucket? Chart their ideas and, after you collect the rain, compare the results to their predictions.

6 Intentional Read Aloud

Literacy: Vocabulary

Children learn words to describe different clouds.



Make & Prepare

- Review the ASL sign for "I learned" on the *Blueprint* website.

Additional Materials

- Anchor Chart: "Readers Can Say"
- Unit Chart: "Words We Are Learning"
- Markers

Words We Are Learning

wispy: light and floaty

Supporting Multilingual Learners

As always, remember to invite multilingual learners to share the words they know for new terms and vocabulary. Regardless of their level of English proficiency, thinking in all of their languages will help them to solidify and extend their learning.

Interacting with Children

In this lesson, we suggest you model your thinking about what you learned from the book. Use this strategy often when working with children no matter what the topic to support their growing oral language skills.

Before

CONNECT to learning about clouds and rain. SHOW the cover. ASK children what they notice.

We are learning more about what happens in the sky. At Talk Time, we talked about clouds and rain.

Today we are going to read an informational book about clouds. The title is *Clouds*, by Katharine Hall. Look at the cover. What do you notice?

INVITE children to describe the clouds. STATE that clouds come in different colors, sizes, and shapes.

If you were a meteorologist, how would you describe these clouds?

Yes, these clouds are white. They look kind of fluffy. Do clouds always look exactly like this? How else can they look?

Clouds can be different colors, sizes, and shapes. The pictures in this book show photos of real clouds. You will see clouds of all different colors, sizes, and shapes.

PROMPT children to listen to the words the author uses to describe different clouds.

As we read *Clouds*, listen carefully to the words that the author, Katharine Hall, uses to describe different clouds. Are you learning new ways to describe different types of clouds?

During

Pause after "others are thin and wispy." CONTRAST the clouds in the first two photos. DEFINE "wispy." 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).

These two photos show clouds that are very different. They are opposites. What words does the author use to describe the clouds in the first photo [flip back to this page]? Yes, they are big and fluffy. But how does she describe these clouds? She calls them thin and wispy. Can you say "wispy"? Let's find the syllables or beats in that word: wis-py. Have a closer look at these clouds. What do you think "wispy" means?

Wispy means light and floaty. What else could be described as wispy?

Let's add "wispy" to the list of words we are learning. Do you know any other words that mean the same thing?

MODEL using the sign and sentence stem "I learned" to use the word "wispy" to describe clouds.

Readers, I am signing "I learned" because I learned a new word to describe clouds. I learned that clouds are not always big and fluffy. They also can be light and floaty. I learned that clouds can be wispy.

Let's keep reading to learn more words the author uses to describe different kinds of clouds. When you learn a new way to describe a cloud, make the sign "I learned" [demonstrate]. Practice signing that now.

After

INVITE children to share descriptive cloud words they learned. PROMPT them to use the sign and sentence stem, "I learned…"

There are many different kinds of clouds. The author, Katharine Hall, used special words to describe the ways clouds could be. Think about ways to describe different clouds…

If you would like to share a word to describe clouds that you learned from this book, sign "I learned." You can start by saying, "I learned…"

Children solve a problem: how to fix a hole in a cup.

Build Interest

INVITE children to help you solve a problem. SHOW children the hole in the cup. ASK them to think about how they could fix it.

We've started to talk about what happens in the sky. We know that one thing that happens is that rain falls from the sky. One thing some people like to do is collect rain water. Then they use the rain water to water their plants. That's one way to reuse water.

Here is one of the cups I thought we could use to collect rain water. But look at it! What do you notice at the bottom of it?

Yes, there is a hole at the bottom of the cup.

- How are we going to collect rain water if our cup has a hole on the bottom of it?
- How can we solve this problem?

Build Understanding

DISCUSS children's thinking. MAKE a list of their ideas and the materials they might need. ADAPT the lesson to match children's ideas.

When scientists have a problem, they think carefully about it and use what they know to help solve it! We know that a cup with a hole in it won't be very helpful for collecting water. The water will drain right out!

Let's make a list of ways we could solve this problem. I'll write down materials and ideas you have.

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…

- Gesture: Show me how you want to begin. Oh look! You are [using tape, using paper etc.]. Let's try it! I wonder if [model observing and formulating questions].
- Yes/No: Are you [using tape, using paper, etc.]? Let's try it. Does this help block the hole? Should we try something else? Does this help?
- Either/Or: Are you [using paper], or are you [using tape]? Let's try it! Does this help us block the hole, or should we try something else?
- Open-ended: How will you begin? What materials do you need? How will you see if your plan worked?

GIVE children time to work on creating a way to block the hole. ENCOURAGE them to discuss their work and what they observe. Then SUMMARIZE children's work.

Today we wanted to find a way to repair a hole in our cup.

We wondered… [restate any questions children had].

We tried… [restate what children tried].

We discovered… [restate observations children made],

DISTRIBUTE science journals. INVITE children to record their thinking.

Make & Prepare

- Create a collection of materials for children to tinker with, as they explore what might make a good "cork" for the hole and why. Add paper towels, ribbon, painter's tape, etc.
- Download, print, and add a copy of "Help! My Cup Has a Hole In It!" to children's science journals one per child.

Additional Materials

- Cup with a hole in it (one per group or child)
- Chart paper
- Markers
- Science journals
- Writing tools

Build Background Knowledge

Connect to other experiences where children have had a problem that needed a solution. Invite children to share examples of things they have fixed that are real objects.

Stretch Their Thinking

Invite children to test to see that their ideas were effective.

Listen/Look For

- What ideas do children have to fix the cup?
- What questions do children have as they work?

Robust STEM Activities

The purpose of this lesson is to have children work as problem solvers. The materials you choose can be flexible. The best problem, of course, will be the most authentic one. So if you have something with a hole in your classroom that children can try to fix, use that.

Supporting Multilingual Learners

We use the strategy of "Layered Questioning" in the "Build Experience" 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.

7 Gathering Times

Literacy, Physical Development, Science

Greeting Time

Children move rain sticks to signal words that rhyme.

Literacy: Phonological Awareness

DISTRIBUTE rain sticks. INVITE children to use them to make sounds.

We are learning about clouds and rain. Can you make sounds with your rain stick?

REVIEW how we know when words rhyme.

Now let's play a rhyming game. How do you know when words rhyme? Yes, they sound the same at the end.

EXPLAIN how to play the game.

I will say two words. If the words rhyme, gently tap your rain stick on the floor two times like this [demonstrate]. Try that now.

If the words do not rhyme, do not tap your rain sticks. Keep them still like this [demonstrate]. Try that now.

PLAY several rounds of the game. USE the examples below. INVITE children to suggest words as well.

Listen carefully: rain, main. Say: rain, main. Yes, those words rhyme, so we tap our rain sticks two times.

Cloud, moon. Say: Cloud, moon. No, those words do not rhyme, so we keep our rain sticks still.

How about: cloud/proud? Rain/cane? Rain/sun?

Who would like to say two words for us?

COLLECT the rain sticks.

Materials

- Children's rain sticks

Rhyming Words

Remember, identifying rhyming words is a phonological skill. It is based on how the words sound, not on the way the words look or are spelled. Therefore, some rhyming words use the same spelling pattern, such as the "-ain" in "rain" and "main," whereas others use different spelling patterns, such as the "-ain" in "rain" and the "-ane" in "cane."

Movement Time

Children blow a cotton ball to a partner.

Physical Development: Fine Motor Skills

REVIEW how to breathe in through your nose and blow out through your mouth.

It's fun to play games with our rain sticks. Now let's play another game with a partner.

Imagine these cotton balls are clouds. How can we act like the wind and move the clouds?

Yes, we can use our breath. Let's practice taking a deep breath in and blowing air out of our mouths.

GUIDE partners to come onto their hands and knees across from each other (or lie on their bellies) with several feet of space between them. GIVE one cotton ball to each partnership. EXPLAIN how to take turns blowing the cotton ball to each other. INVITE children to take turns blowing the cotton ball to each other.

Today we will play with a partner. You and your partner will come onto your hands and knees across from each other like this [demonstrate]. You will take turns blowing your pretend cloud to each other. Try to move it by only using your breath as the wind!

INVITE children to share what they noticed and how they feel.

What did you notice about playing that cloud game?

How did it make you feel?

Make & Prepare

- One cotton ball per partnership

Safety Tip

Through modeling and support, help children focus on how to direct their breath on the cotton ball, not on each other. To avoid the spread of germs, you can also show them how to hold their hand above their mouth, or use both hands to encircle their mouth, to direct their breath onto the cotton ball.

Talk Time

Children set up an investigation to see if water changes.

Science: Scientific Inquiry and Practices

SHOW a few pages in *Picture the Sky*. POSE the question: Does water change?

When we read *Picture the Sky* [show], we talked about how the sky changes.

But I wonder. Does water change? What do you think? How could we find out?

Yes, we can add some water to a container and observe it over time.

SET UP an experiment with children. Below is one suggested way to organize it but be open to children's ideas.

It may be hard to see how the water changes because it's clear. Let's add some food coloring to the cup of water. Who can add three drops of food coloring? Now we can see the water better.

Now let's pour the water into a bag and seal it. Who wants to help?

Now let's attach it to a window. The light from the window will help us see if and how the water changes more easily.

INVITE children to share their predictions. ENCOURAGE their scientific thinking.

I wonder what will happen to this water. What do you predict?

Those are thoughtful predictions! We will observe the water each day. This investigation will help us learn more about water and how it might change!

Make & Prepare

- Gather materials: one cup of water, one clear, plastic freezer bag that seals, food coloring, and an eyedropper.

Additional Material

- The book *Picture the Sky*

The Water Cycle

Return to the experiment over the next several days. Ask children what they observe. They may notice how the water evaporates and/or condenses in the bag. These processes relate to the water cycle. Water on Earth evaporates into the air, condenses in clouds, and then falls back down to Earth. While children do not need to be able to articulate the steps in the water cycle, it is important they practice observing, testing, and asking questions.

Reflection Time | Do you wish it rained/didn't rain today? Why?

Children imagine what clouds look like.

Before

CONNECT to the book *Clouds* and how clouds look different from one another. SHOW the pictures on the first two marked pages.

As we read the book *Clouds* [show cover], we noticed that clouds can look different. Some are wispy [show marked page], and some are thick and gray [show marked page].

Some people even look at clouds and think they resemble or look like something else.

SHOW the third marked page. DESCRIBE what you think the cloud looks like. SHOW a hair comb. COMPARE the image in the book to the comb.

For example, when I look at this cloud, I think the cloud looks like a comb [show]. It has a part that looks like a handle [point to image]. It also looks like it has teeth [point to image]. That's what you call the part of the comb that goes through someone's hair. What do you think the cloud looks like?

Watch as I write about the comb cloud.

During

DRAW a cloud that looks like the one in the book. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is my cloud. Should I make it look wispy, or should it fill the sky?

Suggested message: "It looks like a comb."

PAUSE to focus on phonological awareness (/l/ in the word "looks").

Looks. Say that with me: looks. What sound do you hear at the beginning of the word "looks"? /l/. What letter makes the /l/ sound? Yes, the *letter l* makes the /l/ sound. When I write the lowercase *letter l*, I start at the top and drop down. Now you try writing it with your finger in the air.

INVITE children to reread the message with you.

After

SHOW other photographs from the book and/or images of clouds. ASK children what they think the clouds resemble. INVITE children who speak the same home language to share with each other in their home language as a support.

Let's continue looking at clouds and using our imagination to think about what they look like.

SUMMARIZE how clouds can resemble other objects.

Today we imagined what other objects clouds could look like. We thought clouds could look like…

REREAD the message one more time.

[Transition] INVITE children to use their breath to blow a pretend cloud away.

In Movement Time, we have been blowing cotton balls and pretending they are clouds. Imagine your breath is the wind. Put a pretend cloud on your palm like this [demonstrate]. Take a deep breath in through your nose, and then blow the air slowly out of your mouth. Blow your cloud away!

Make & Prepare

- Download and print images of clouds.
- Have the book *Clouds* ready. Mark the following pages with sticky notes:
  - "others are thin and wispy"
  - "Sometimes clouds fill the sky"
  - "others are high up in the sky"
- A hair comb

Remember to Save

- Save cloud images for Small Group Day 7.

Comparing Items

While judging whether two things are the same or different seems like a simple skill to experienced learners, it is actually a high-order thinking task that requires using prior knowledge and active looking, listening, and comprehension skills. Young children learn the concepts of same and different through explicit modeling, discussion and hands-on independent work.

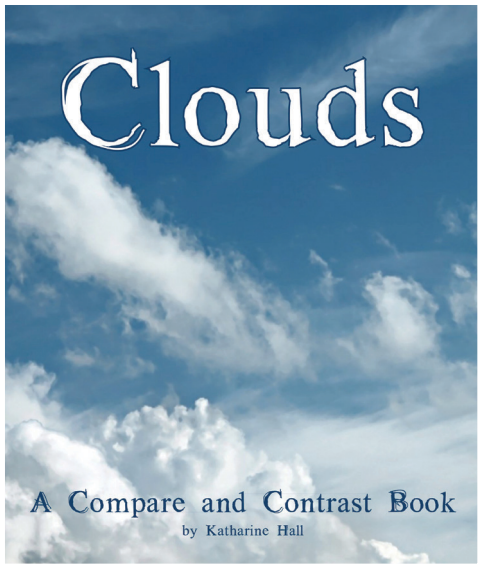
Keep It Going

- Gather children outside. Invite them to lie down on the grass or ground. Encourage them to observe the clouds floating by. What do they see? Any shapes? Animals? Invite them to share what they see or use chalk to draw their observations.
- Join children at the art center. Encourage them to create clouds. What shapes will they make? Will they make their clouds look like animals?

7 Intentional Read Aloud

Literacy: Comprehension

Children share what they wonder about clouds.



Make & Prepare

- Review the ASL sign for "I wonder" on the *Blueprint* website.

Additional Materials

- Anchor Chart: "Readers Can Say"
- Unit Chart: "Words We Are Learning"
- Unit Chart: "What Happens in the Sky?"
- Photo of local meteorologist

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 wondered if clouds feel cold!"

Vocabulary Development

"Blanket" is a word with multiple meanings depending on how it's used. As a noun, it means the fabric used as a bed covering ("Use a blanket to say warm"). But it can also be used as a verb to mean cover ("The clouds blanket the sky"). Make sure to clarify its different usages. Use pictures and gestures to provide context for children. Also invite them to share the words they use at home to clarify meaning.

Before

RESTATE that there are different kinds of clouds.

We read this informational book *Clouds*. We learned that clouds can be different colors, sizes, shapes, and more!

SHOW the cover. MODEL asking an "I wonder" question. INVITE children to share what they wonder. PROMPT them to use the sign and sentence stem "I wonder."

When I look at the cover, I see clouds on top of one another. I wonder why clouds form at different levels?

What are you wondering about? If you would like to share, sign "I wonder" [demonstrate]. You can start asking your question by saying, "I wonder…"

As we reread *Clouds* today, notice what else you wonder about these different clouds.

During

Pause after "Some clouds are colorful." MODEL asking "I wonder" questions. INVITE children to share what they wonder. REMIND them to use the sign and sentence stem, "I wonder."

Wow, look at these colorful clouds! What colors do you see? I wonder why these clouds are red, orange, yellow, pink, and purple? To me, this sky looks like a masterpiece, or a great work of art [point to the word on the Unit Chart: "Words We Are Learning"]! I wonder if anyone is observing this colorful sky? I wonder if an artist will paint a picture of it?

What do you wonder about the clouds in this photo? If you would like to share, sign "I wonder." You can start by saying, "I wonder…"

Pause after "Some clouds tell us a storm is coming." ASK "I wonder" questions. INVITE children to share their thinking. Then ASK them to share what questions they are wondering.

These dark clouds in the sky give us information: a big storm is coming! What happens when a storm comes?

These clouds are so full of water that they are about to burst with rain. I wonder if there will be the sounds of thunder crashing [point to ear] and the sight of lightning flashing [point to eye]? I wonder if there are animals living in this ocean habitat? I wonder what they will do when the storm comes? What do you think?

What else do you wonder? Sign "I wonder" if you would like to share. Say, "I wonder…"

Pause after "others are high up in the sky." INVITE children to turn and talk about what they wonder. ENCOURAGE them to use the sentence stem, "I wonder."

Think about what you are wondering. Turn and talk with a partner about your questions. When it is your turn to talk, you can say, "I wonder…"

Pause after "and others blanket the sky." EXPLAIN the use of the word "blanket."

These clouds blanket the sky. Just as we spread out a blanket to cover our bodies, sometimes clouds spread out to cover part of the sky [drag your finger across the clouds]. I wonder how much sky these clouds cover?

After

STATE that meteorologists ask questions about the sky. INVITE children to ask lingering questions.

This book raised many questions about clouds. That is something that meteorologists do. Meteorologists like [give name and show photo] not only observe the sky, but also they ask questions about it. We are thinking like meteorologists. What else do you wonder?

RETURN to the Unit Chart: "What Happens in the Sky?" INVITE children to add what they are learning and other questions they have.

Children explore the shape of clouds using shaving cream.

Small Group
Science: Earth and Space Sciences
7

Build Interest

INVITE children to browse images of clouds. BEGIN A DISCUSSION about the similarities and differences in cloud shapes. Refer to the Unit Chart: "We Can Describe."

We started talking about clouds and rain. In the book *Clouds* [show], we noticed that clouds have different shapes. Let's look at some more images of clouds. Let's discuss:

- How are these clouds the same?
- How are they different?
- What shapes do you see?

Build Understanding

TELL children they are going to create clouds with shaving cream.

You noticed many things that were the same and different about the clouds. Clouds can be thin and wispy or full and fluffy. Today we are going to try to make pretend clouds using shaving cream!

GIVE each child a bag of shaving cream. INVITE them to explore it.

Let's use some of our senses to explore these bags of shaving cream [point].

How does it feel? How does it move inside the bag?

Build Experience

DISTRIBUTE paper plates and have tools available. INVITE children to empty their shaving cream onto a plate. GIVE children time to explore and make cloud shapes with the shaving cream using their fingers and/or the tools. CONNECT with multilingual learners by describing the cloud shapes they make.

Here is a paper plate. We will empty our bags of shaving cream onto the plates. These are some tools you can use as you make a cloud shape with the shaving cream [point].

- Do you want to explore the shaving cream with your fingers? Or will you use one of the tools?
- Can you make a cloud shape?
- Which kind of cloud does your shaving cream look like? Big and fluffy or thin and wispy?
- Can you find a picture of a cloud that matches your shaving cream cloud?

SUMMARIZE making cloud shapes with shaving cream.

Today we used shaving cream to try to make pretend clouds. Let's share:

- How would you describe one of the clouds you made?
- How many different clouds did you make?
- What did you do to make the shaving cream look like that kind of cloud?

Make & Prepare

- Fill 1/4 of a sealable plastic bag with shaving cream (one for each child).
- Gather a collection of tools (craft sticks, toothpicks, plastic spoons, etc) children can use as they explore and make cloud shapes with the shaving cream.

Additional Materials

- The book *Clouds*
- Images of clouds from MTP Day 7
- Anchor Chart: "We Can Describe"
- Paper plates

Build Background Knowledge

If you are near a window, tape bags of shaving cream to the window, so children can move the shaving cream in their bag and look at clouds that are in the sky.

Stretch Their Thinking

Use other materials—such as cotton balls, fabric, paint, etc.—to create cloud shapes and textures.

Listen/Look For

- How do children describe clouds?
- What do children notice as they work with shaving cream?

Messy Explorations

Cover the tables with newspaper or plastic table cloths, as things may get messy! Or consider taking the activity outside to do with children.

Materials Safety

Review ways children as scientists can practice safety during investigations. Explain that scientists are always careful. Remind children that they should not put any materials in their mouth.

Responding to Children

You may have children that don't want to touch the shaving cream! Here are some ways they can still participate: 1) leave the shaving cream in the sealed plastic bag; 2) provide gloves; or, 3) sit next to them and have them guide you to make a cloud.

Keep It Going

- Continue to work on children's understanding of shapes. Gather together models of two-dimensional shapes such as triangles and squares. Model sliding, flipping and rotating these types of shapes. Ask children whether these shapes remain the same when you move them ("I just flipped this triangle over. Is it still a triangle?). Ask children to explain their thinking.

8 Gathering Times

Literacy, Physical Development, Creative Arts

Greeting Time

Children move rain sticks to signal words that begin with /r/.

Literacy: Phonological Awareness

ASK children to identify the beginning sound in "rain."

Sometimes we can hear the rain. Let's play a listening game using our rain sticks.

Say the word "rain." What sound do you hear at the beginning of "rain"? Yes, the /r/ sound.

DISTRIBUTE rain sticks. EXPLAIN and PRACTICE how to play the game: When you hear a word that begins with /r/, turn over your rain stick.

I'll say a word. If the word begins with the /r/ sound as in "rain," turn over your rain stick like this [demonstrate]. Try it now. But if the word does not begin with /r/, don't turn over your rain stick. Keep it quiet and still. Try it now.

PLAY several rounds of the game. USE the examples below. INVITE children to suggest words, as well.

Listen carefully: rocket. Say: rocket. Yes, "rocket" begins with the /r/ sound just like "rain." So we turn over our rain sticks.

Ocean. Say "ocean." No, "ocean" does not begin with /r/. So we keep our rain sticks quiet and still.

Listen to the next word: river… rabbit… lake… snow… ranch…

Who would like to say another word?

COLLECT the rain sticks.

Materials

- Children's rain sticks

Keep It Going

- Reinforce letter-sound correspondence throughout the day. For example, "Please go get the art supply from the table that begins with the /r/ sound. Thank you for bringing me the ribbon – /r/ for ribbon."

Movement Time

Children use different kinds of breath to blow cotton balls.

Physical Development: Fine Motor Skills

GUIDE children to use their breath like a gentle breeze versus a strong gust.

Have you ever heard the wind blow? Have you ever felt it?

Sometimes wind is a gentle breeze. Can you make a gentle breeze with your breath? [demonstrate]?

Other times wind is a strong gust. Can you make a strong gust with your breath? [demonstrate]?

ADD "breeze" and "gust" 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).

Let's add "breeze" and "gust" to the list of words we are learning. Do you know any other words that mean the same thing?

How do you think a gentle breeze would move a cloud? How about a strong gust?

GIVE a cotton ball to each child. GUIDE them to use their breath like two kinds of wind to blow the cotton ball.

Imagine our breath is the wind moving cotton balls like clouds. Make space and lay on your belly. Put your cotton ball on the floor in front of you.

First, blow it with a gentle breeze. Now blow it like a strong gust. What did you notice about the different kinds of wind?

Make & Prepare

- One cotton ball per child

Additional Material

- Unit Chart: "Words We Are Learning"

Words We Are Learning

- breeze: gentle wind
- gust: strong wind

Vary the Lesson

Use a fan on different speeds to demonstrate the difference between the meaning of the words "breeze" and "gust."

Talk Time

Children create sounds of a rainstorm with their hands.

Creative Arts: Music

ACTIVATE children's knowledge about rain storms. PLAY a recording of a rainstorm.

It can get windy before or during a storm. Have you ever observed a rainstorm? What did you hear?

Let's listen to the sounds of a rainstorm…

MODEL and GUIDE children to make sounds to imitate a rainstorm building up and then calming down. NARRATE what the sounds are.

How about we create the sounds of a rainstorm using our hands?

- Rub your hands together. The wind is blowing.
- Tap your fingers on the floor. Here come the drops of rain.
- Pat your legs. The rain is getting heavier now; it's pouring.
- Clap your hands. Whoa, thunder is crashing!
- Pat your legs. The thunder has stopped, but it's still pouring rain.
- Tap your fingers on the floor. The rain is starting to calm down.
- Rub your hands. It sounds like it has stopped raining.
- Rest your hands. The rainstorm is over.

If you were a meteorologist, how would you describe that weather?

Make & Prepare

- Cue up an audio recording of a rain storm.

Sensitivity About Storms

Some children may be frightened by storms. You could omit the clap of thunder if you think it will be jarring. Talk with children who feel scared. Suggest ways for them to calm themselves down. Talk Time on Day 10 is also meant to help address the potential fear of storms.

Reflection Time | Where did you see water today? How did you use it?

Children begin work on a class book.

Before

CONNECT to discussing and viewing the sky. REFER to the Unit Chart: "What Happens in the Sky?"

We have been talking a lot about the sky and the things we see in the sky. We've read many books about the sky and clouds [show books]. We are learning a lot [point to the chart]. Let's review!

One thing about the sky I am learning a lot about is clouds. I know they come in different shapes and sizes.

TELL children that they are going to make a class book about what they are learning.

Writers, we are going to create a class book about the sky. Everyone will get a page to draw and write about 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 some clouds. DESCRIBE what you are doing and thinking. INVITE children to contribute.

I am going to draw some clouds. They can be different shapes and sizes. How big should I make this cloud?

Suggested message: "Clouds can be different shapes."

PAUSE to focus on phonological awareness (combining onset and rime).

Listen to the parts of the word I want to write next. "c"… "an." Put those parts together. What is the word? Yes, "can." Listening carefully to the parts of a word can help you get ready to write it. Watch as I write the word "can."

FINISH writing the message. 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 am learning. What are you learning? What do you now know?

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.

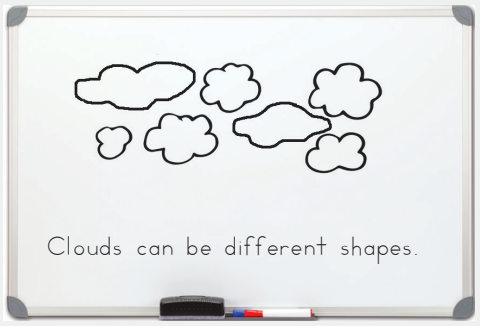
RESTATE that our class book will show what we know.

This book will be a collection of what we know about the sky. I can't wait to read your writing!

REREAD the message one more time.

[Transition] INVITE children to continue writing on the topic at the writing center.

You can continue to write about what you know about the sky at the writing center.



Materials

- Images of the sky from Day 2: MTP
- Clipboards (one per child)
- Blank paper for writing
- Writing tools (pencils, markers, crayons, etc.)
- Magnetic letters for reference
- The books *Picture the Sky*, *Up, Up, Up!,* and *Clouds*
- Resources such as magazines or brochures that feature sky pictures that children can cut out

Responding to Children

When conferring with children about their writing, try connecting to shared classroom experiences. If a child is looking for guidance on drawing or writing, talk about a previous, similar experience in the classroom. You might try, "remember when I was writing the message and I wanted to write the word..., what did I do?"

Class Book *We Know the Sky*

Children can continue to add pages to this book as the unit progresses and they explore this topic. Plan on inviting families to hear the class book on Day 19.

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.

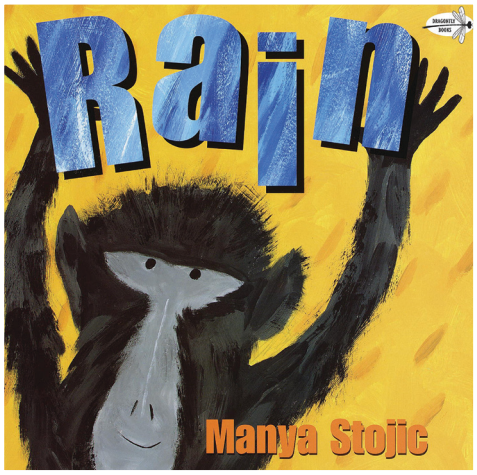
Keep It Going

- Add mini-booklets to the writing center. Invite children to write about what they are learning about the sky across several pages.

8 Intentional Read Aloud

Science: Scientific Inquiry and Practices

Children identify the senses the animals use to observe the rain.



Make & Prepare

- Retrieve the Unit 2 Chart: "5 Senses."

Book Awareness

When reading aloud, it's important to name the author and illustrator so children realize that people just like themselves are writing and drawing the books. Occasionally, review what the author and illustrator do to remind children of their different roles.

Following Up

Continue to check in on the science investigation you started in Talk Time on Day 7. How has the water changed? What connections can children make to the water cycle? What questions do they have?

Keep It Going

- Encourage children to use their senses to observe the weather outside. What does the air smell like? How does it feel? How would you describe the weather? How do you predict the weather might change today? Why do you think so?

Before

SHOW the Unit 2 Chart: "5 Senses." ASK children what senses we can use to know that it might rain. ASK children what they might see and hear before or during a rain storm.

Just like meteorologists, we are thinking and talking about what happens in the sky. Look at our "5 Senses" chart. What senses can we use to know whether it might rain?

Yes, we can use our eyes to see the sky. What might the sky look like if rain is coming?

During a rainstorm, we might hear thunder with our ears. What does thunder sound like?

INTRODUCE the book. SET THE FOCUS: To pretend to observe the rain with our five senses with the animals.

Today we are going to read a book about some animals who use their senses to tell that rain is coming! They're kind of like meteorologists! The title is *Rain*, and it is written and illustrated by Manya Stojic.

As we read, notice how the animals use their senses. Let's pretend that we are observing the weather along with them!

During

Pause after "I must tell the zebras." ASK which sense the porcupine is using. MODEL and INVITE children to point to their noises and sniff.

What sense is the porcupine using? Yes, she is using the sense of smell. Can you point to the body part that helps you smell? Pretend to smell the rain coming: Sniff, sniff. What does it smell like?

Pause after "We must tell the baboons." ASK which sense the zebras are using. MODEL and INVITE children to point to their eyes and pretend to see lightning flashing.

What sense are the zebras using to observe what is happening in the sky? Yes, the sense of seeing. Point to the body parts you see with. What do the zebras see in the sky that lets them know that a storm is coming? Imagine you see lightning flashing in the sky! Open your eyes wide!

Pause after "I must tell lion." ASK which sense the rhino is using. MODEL and INVITE children to open their hands to the sky and pretend to feel raindrops.

What sense is the rhino using to observe the rain? Yes, he feels the rain drops splashing on his skin. How can you feel rain drops? Open your hands up. How do the rain drops feel on your skin?

Pause after "I can taste it." ASK which sense the lion is using. MODEL and INVITE children to open their mouths and pretend to taste the rain.

What sense is the lion using to observe the rain? Yes, he is tasting the rain. Do you think he likes it? How can you tell? Yes, he is smiling with his mouth. Which body part do you taste with? Would you like to taste the rain? Look up and open your mouth. What does the rain taste like?

After

TAKE a picture walk from the page: "I can't taste the rain now…" to the page: "We can't see the rain now." DISCUSS how the animals are still using some of their senses after the rainstorm.

The animals in this book are like meteorologists! They use their senses to track the rainstorm. Let's look back at the animals after the rainstorm is over. Notice how they are still using their senses…

How are the animals still using their senses?

Children explore how water droplets interact with each other.

Small Group
Science: Earth and Space Sciences
8

Build Interest

REFER to the Unit Chart: "What Happens in the Sky?" ASK children to think about how clouds are formed.

We have been asking lots of questions, like scientists do, about the sky and the clouds. We know clouds are made of water. But I wonder how does water form a cloud? What do you think?

SUMMARIZE children's responses.

You said….

Build Understanding

ASK children how they can find out how water forms a cloud. SHOW some of the materials you gathered to spark ideas.

When scientists wonder about nature and have lots of questions, they do investigations to explore, observe, and learn more. We just thought about how water forms a cloud. I wonder if we can do an investigation to test our ideas. What materials can we use?

GIVE children time to share their ideas. SELECT one way they suggested to test the materials. An example is provided below.

Let's try this! Here is some wax paper [show] and water [show]. Let's put one drop of water on this wax paper and observe.

- What do you think a drop will look like?
- What do you think it will do on the paper? Will it move, stay still, or change shape?

INVITE a volunteer to model how to use the pipette to put a drop of water on the wax paper. ENGAGE in a discussion. ASK children what they think will happen when you drop more water onto the wax paper.

Let's have one person remind us how to use a pipette. Squeeze and then place the tip into the water. Release and watch the water fill the pipette. Now drop it onto the paper.

- What is happening to the water droplet? What do you see?
- What if we add more drops of water to the wax paper? What do you think will happen?

Build Experience

DISTRIBUTE a piece of wax paper, pipette, and a cup of water to each child. GIVE children time to explore how water droplets interact with each other on wax paper. CONNECT with new English learners by describing what happens with their water droplets.

Here are your own materials to try out this investigation. Squeeze your pipette to create one drop of water at a time. Slowly add more and use your power of observation to observe how water drops interact with each other.

SUMMARIZE today's investigation of water.

Today we put drops of water on wax paper to see what they do. Let's share:

- What happened to the water droplets?
- Were you surprised by anything?

We noticed the water drops join together, just like they would in a cloud. Imagine hundreds of water drops joining together to create a cloud!

DISTRIBUTE science journals. INVITE children to record their thinking.

Make & Prepare

- Download, print, and add a copy of "Water Droplets" to children's science journals (one per child).
- Cut sheets of wax paper for each child in your group, approximately six inches by six inches.
- Pour a small cup ½ full water for each child.

Additional Materials

- Pipettes or eye droppers
- Unit Chart: "What Happens in the Sky?"
- Science journals
- Writing tools

Build Background Knowledge

Give children time to drip drops of water into the cup slowly using pipettes and eye droppers for fine motor practice.

Stretch Their Thinking

Invite children to think about how the droplets are moving. What happens when you blow on them? Touch them with a toothpick? Can you break apart the droplets? How?

Listen/ Look For

- How do children describe the water drops?
- What observations do children make about water?

Did You Know?

Clouds come in many shapes and sizes, but they are all made of the same thing: tiny droplets of water or ice crystals. On and near the ground, the water inside of air is invisible in the form of water vapor. When warm air rises, it changes by expanding and cooling. Cool air doesn't hold the same amount of water vapor, and the vapor begins to condense. This means water molecules turn from vapor to liquid droplets. These droplets, which are small and light enough to stay in the air, cluster together to form a cloud. If those drops of water grow large enough, they will fall as rain or snow.

Language Development

All children at this age are developing language skills and benefit greatly from real experiences like these that explore new content while using new vocabulary in context. Narrate the actions observed (squeeze, release, drop, join, etc.) and use ample descriptive language (full, clear, heavy, etc.) to help support language development.

9 Gathering Times

Literacy, Physical Development, Social Emotional

Greeting Time

Children use rain sticks to blend words.

Literacy: Phonological Awareness

ASK children to blend the onset r- and the rime –ain.

Listen carefully to these word parts: r-ain. Can you blend them to make a word? Yes, rain.

Let's play another listening game using our rain sticks.

DISTRIBUTE rain sticks. EXPLAIN and PRACTICE how to play the game: Say each word part, and turn the rain stick over as you blend them into a word.

I'm going to say two word parts. You repeat the parts. Then turn over your rain stick as we blend the two parts to make a word.

Let's practice. Repeat after me: h-ear. Now turn over your rain stick as we blend these parts into the word: hear. We can stretch out the word to match our rain sticks: heeeear. Can you try?

PLAY several rounds of the game. USE the examples below. INVITE children to suggest words, as well.

Repeat after me: w-et... d-eep… g-ush… f-ull… c-ool…

Who would like to try one?

COLLECT the rain sticks.

Movement Time

Children stretch out cotton balls and blow them.

Physical Development: Fine Motor Skills

SHOW the marked page in *Clouds*. GIVE a cotton ball to each child. MODEL and PROMPT children to stretch it out. ASK children how it changed.

We just stretched out some word parts and put them together. That reminds me of wispy clouds like these [show]. Don't they looked stretched out too?

What if I stretch out this cotton ball [demonstrate]?

Can you stretch out your cotton ball too? How does it change?

Now it is not round and fluffy. It is thin and wispy. I wonder what happens when we blow on this new shape.

GUIDE children to blow the wispy cotton balls. INVITE them to use their breath like a gentle breeze and a strong gust. DISCUSS their observations.

Make space and lay on your belly. Place your wispy cotton ball in front of you. Imagine it is a cloud and your breath is the wind. You can create a gentle breeze like this [demonstrate], and you can use a strong gust of wind, too, like this [demonstrate].

- What did you notice about blowing the wispy cotton ball?
- Which kind of "wind" seemed to work better? Why?

Talk Time

Children practice "Raindrops."

Social Emotional: Self-Awareness and Self-Concept

CONNECT breath work to Mindful Moments.

Do you like pretending that your breath is the wind? We often use our breath to do mindfulness exercises, too.

Let's practice a Mindful Moment called "Raindrops" [show card].

GUIDE children to do "Raindrops."

Sit comfortably and close your eyes.

Take a few deep breaths in and out.

Notice the thoughts in your mind. Are you thinking about a lot of things?

Imagine your thoughts are pieces of dirt on your skin.

Make believe it is starting to rain. Welcome the warm, gentle raindrops on your skin.

Let them wash off the dirt. All your thoughts just trickle away.

Now the bright sun comes out and dries you off.

Slowly open your eyes…

How do you feel?

ADD the "Raindrops" card to your Mindful Moment basket.

Materials

- Children's rain sticks

Onset and Rime

Use one-syllable words that begin with a consonant such as the word "wet." Remember, the onset is the initial consonant or consonant blend (w-). The rime is the vowel and any final consonants (-et). Segmenting and blending onset and rime is one element of phonological awareness.

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.

Make & Prepare

- Have the book *Clouds* ready. Mark the page that begins "others are thin and wispy" with a sticky note.
- One cotton ball per child

Mindful Breathing

Our bodies are breathing all day, every day. But how often do we bring awareness to our breathing? When we pay attention to the physical aspect of our breath, we can breathe in different ways, which results in different effects to our body and mind. For example, slow, deep breathing can be calming, whereas short, sharp breaths may energize us. When highlighting breath work with children, exaggerate your inhales and exhales.

Make & Prepare

- Download and print the "Raindrops" card.

Mindful Moment

Sometimes our minds get so busy that we can feel stressed or confused. Though it is nearly impossible to stop thoughts from arising, we can practice noticing them without judgment. When children start to become aware of their thoughts, they build a higher level of self-awareness. They can begin to select which thoughts to keep and allow the rest to be released.

Reflection Time | Which of your senses tells you the most about the weather? Why?

Children select appropriate clothing for a rainy day.

Before

CONNECT to discussing what information we get from the sky. REVIEW how we often look to the sky to determine what kind of clothing to wear.

We have been talking about the things that we see in the sky and how we use the sky to get information. The sky helps us understand what kind of weather we are having! Look out the window [gesture toward the window]. What kind of weather do we have today?

Yes, the weather is… When you know what the weather is, you can make choices about what kind of clothing to wear for the day.

ASK children what dark and gray clouds would tell you about the weather. Then TELL children they are going to think about what to wear on a rainy day.

Let's use what we know about clouds to help us think about the weather. If you saw this cloud in the sky [show image you marked in the book *Clouds*], what do you think the weather might be?

Yes, it might rain. If it was going to rain, what kind of rain gear, clothing, or other things, should we have to keep us dry? Watch as I ask that question in our message. Then we will choose the best clothes for a rainy day!

During

DRAW yourself looking out a window at a rainy day. DESCRIBE what you are doing and thinking as you draw. INVITE children to contribute.

Here I am looking outside. I want to draw a rainy day. What should I include?

Suggested message: "What should I wear?"

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 what I should wear if it rains. 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

ENGAGE children in an activity to identify clothing for a rainy day.

I brought a basket of clothes to look at. I am going to hold up an item. If you think we should wear it or use it in the rain, sign "yes" like this [demonstrate]. If you think we don't need it to keep us dry, sign "no" like this [demonstrate].

Let's try one together.

- What is this?
- Should we use this on a rainy day? Sign "yes," [demonstrate] or "no" [demonstrate].
- Why or why not?

SUMMARIZE the discussion and activity.

We just talked about what we would choose on a rainy day. Some things we said were…

REREAD the sentence one more time.

[Transition] INVITE children to jump in pretend puddles.

Let's pretend to put on our rain boots [demonstrate]. Now let's stand up and jump in some puddles. Try to make some big splashes.

Make & Prepare

- Basket of items that would keep you dry in the rain (rain coat, umbrella, rain boots) and other items that would not (sweater, gloves, etc.)
- Have the book *Clouds* ready. Mark the page that begins "others are dark with rain," with a sticky note.
- Review the ASL signs for "yes" and "no" on the *Blueprint* website

Responding to Children

Children will most likely be drawn to the rain coat and rain boots as good selections for a rainy day. If a child chooses an unusual item, encourage them to explain their reasoning. For example, a child might choose a bathing suit and explain that they like to go splash in puddles in their bathing suit on a summer day.

Did You Know?

Some animals are naturally water-repellent, such as otters and ducks. Otters have a very thick undercoat of fur, and ducks' bodies make oil that coats their feathers.

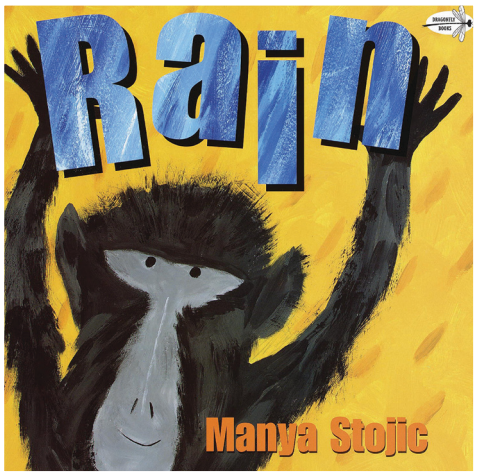
Keep It Going

- Give children an engineering challenge. For example, say "It's raining, but we forgot the umbrella! How would you design one for the class to use in the rain?"

9 Intentional Read Aloud

Science: Earth and Space Sciences

Children discuss how rain helps plants and animals.



Material

- Unit Chart: "Words We Are Learning"

Words We Are Learning

cracked: showing lines from splitting without coming apart

Connections to Other Units

In Unit 8 children learned how animals live in nature. They were exposed to different types of homes and various habitats around the word. The book *Rain* takes place on the African savanna. Even though it is a fictional story, this book brings to light the importance of rain for living things. Children realize that the animals and the plants in this habitat need water to live and grow.

Keep It Going

- When outside, encourage children to look for the effects of rain on living things. "Do you see those puddles? It must have rained last night! Do you see any plants that might need that water to grow? Do you see any animals who might need that water to drink?"

Before

REVIEW why people might observe the sky. ASK children why the animals might track the rain.

Just like meteorologists, we are thinking and talking about what happens in the sky. What can we find out by looking at the sky?

We can tell if it is day or night. We can also tell what the weather is. This information helps us decide what to wear and what to do. Well, I wonder why the animals in *Rain* observe the sky and track the rainstorm? What do you think?

DISCUSS why rain is important. SET THE FOCUS: To find out how rain helps plants and animals.

- Why is rain important?
- How could the rain help the animals?
- How could the rain help the plants?

As we reread *Rain* today, notice how the rain helps to take care of living things on Earth.

During

Pause after "The red soil was hot and dry and cracked." ASK children to describe the ground before the rainstorm. DEFINE "cracked." 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). CONNECT to what plants need to grow.

This is the ground before the rainstorm. How would you describe it? Yes, it is hot and dry. The soil is cracked.

Can you say "cracked"? Let's find the syllables or beats in that word: cracked. What does it mean that the soil is cracked? When something is cracked, it splits without coming apart. Do you see these lines where the dry soil is cracked [point]? Let's add "cracked" to the list of words we are learning. Do you know any other words that mean the same thing?

Think about what plants need to grow. They have plenty of sun, but what else do they need? Yes, water! They need the rain to grow. Do you think the animals are going to track the storm to make sure that the plants will grow?

Pause after "Every tree began to sprout fresh, green leaves." DISCUSS how the rain helped the plants.

Now that the rainstorm has come, look again at the ground. How did it change? How did the rain help the plants?

Yes, the soil is no longer dry and cracked. The water helped the grass, flowers, and trees to grow. How do you think this could help the animals who live in this habitat?

Pause after "…refreshing drink from the watering hole." DISCUSS how the rain helped the animals.

Think about what the animals are doing in their habitat. How did the rain help them?

The rain helps the animals keep cool. The lion rests in the shade of the leaves, and the rhino relaxes in the wet mud. Would there be shady leaves and wet mud without the rain? Why not?

The rain also helps the animals nourish their bodies. The baboons are eating fruit from the trees, and the zebras are drinking refreshing water. Would there be fruit and water without the rain? Why not?

After

RESTATE that rain helps the plants and animals. ASK children to describe the ground at the end and to predict what might happen next.

Wow, the Earth needs rain! It helps to take care of the plants and animals. Living things need water to live in their habitats. What do you notice about this habitat at the end of the book?

Yes, the sun is shining, but there is no rain. It is hot, and the plants and soil are drying out again. So what do you think will happen next? Why?

Children fill a sponge with water until it releases water.

Build Interest

SHOW the empty cup and the pitcher full of water (add a tray underneath these items). TELL children that you will pour the water in the cup. ASK them to tell you to stop when the cup is full.

Take a look at this cup. Is it empty or full? How do you know?

Yes, it is empty. I am going to pour water into it. When it gets full, say "Stop!" Ready?

POUR water into the cup. STOP when it is full. DISCUSS what would happen if you continued to pour water into the cup.

What if I poured more water into the cup? Yes, it would overflow or get so full that it spills! Let's try it!

REFLECT on the activity.

What did you notice? Yes, the water overflowed once the cup was full, and it couldn't hold any more water.

Build Understanding

CONNECT to clouds.

Clouds are just like that cup. Once they get full of water, the water spills out, and it rains.

EXPLAIN that we can experiment by adding drops of water to a sponge. INVITE children to make predictions.

We can't bring a cloud into our classroom, but we can use something that holds water. Here is a sponge [show]. What do you think would happen if we keep adding water to the sponge?

SET UP the experiment with children's help.

Let's try. First, let's place the sponge at the top of an empty jar. Next, let's add water to the sponge. Then we can observe what happens.

Who wants to add one pipette of water to the sponge? What do you notice? Is the sponge full? How do you know?

Build Experience

CONTINUE having children take turns adding water to the sponge and observing. USE what you know about each child's language skills to include and extend participation.

Let's keep adding water to the sponge and observe.

- Gesture: Show me how to add water to the sponge. Thumbs up/down: is it full like a cloud? Can we add more?
- Yes/No: Is the sponge full like a cloud yet? Can we add more? Is the sponge changing? Does it look the same?
- Either/Or: Is the sponge full yet or can it hold more water? Is the sponge changing or does it look the same?
- Open-ended: What do you observe? How is the sponge changing?

SUMMARIZE today's investigation of adding water to a sponge.

Today we added drops of water to a sponge. The sponge soaked up water easily; it was absorbent! It got full just like a cloud gets full of water. Let's discuss what you observed:

- What happened to the sponge?
- How did the sponge change?
- How do you think this is similar to a cloud?
- I wonder… how full does a cloud have to get before it rains? Do you think a cloud is heavy?

DISTRIBUTE science journals. INVITE children to record their thinking.

Make & Prepare

- Download, print, and add a copy of "Sponge and Water" to children's science journals (one per child).
- Empty, clear cup
- Pitcher of water
- Tray to catch water
- Dry sponge
- Pipette or eye dropper
- Clear container (opening should not be wider than the sponge)

Build Background Knowledge

Continue to review the concept of empty and full using different containers and fillers.

Stretch Their Thinking

View images of different clouds. Ask children if they think they would know when the cloud was full.

Following Up

This lesson asked children to make predictions. Making predictions depends a great deal on background knowledge. The more children know, the stronger their prediction skills become. Continue to work with children on making predictions during play, so they can apply their new learning to new situations.

Supporting Multilingual Learners

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

Listen/Look For

- What descriptive words do children use as they engage in this investigation?
- What comparisons to clouds do children make?

10 Gathering Times

Math, Physical Development, Social Emotional

Greeting Time

Children tap their rain sticks to match a numeral.

Math: Numbers and Number Sense

HOLD UP a card with the numeral five. ASK children to identify it.

We have been using our rain sticks in so many different ways. Today, let's use our rain sticks as counting tools!

Look at this card. What numeral is this? Yes, five. There are five animals in the book *Rain* [show].

DISTRIBUTE rain sticks. EXPLAIN and PRACTICE how to play the game: Identify the numeral on the card, and then count as you tap your rain stick on the floor that many times.

In this game, I will hold up a numeral. Name the numeral. Then we will tap our rain sticks on the floor that many times.

So, let's count as we tap our rain sticks five times together. Ready?

PLAY several rounds of the game.

Let's try another one. What numeral is this?

COLLECT the rain sticks.

Movement Time

Children try to blow cotton balls into a target.

Physical Development: Fine Motor Skills

EXPLAIN and MODEL the game.

You looked carefully at those numerals. Now let's use our eyes to play a cloud game!

We are going to work in groups. Each group will get a small yarn circle [show]. This is your target. Each of you will get a cotton ball [show]. Imagine your cotton balls are clouds. You are the wind. You are going to lay on your bellies around your target and try to blow your clouds into the target to form one BIG cloud!

GUIDE children to form groups of three to five. GIVE each group a target. PROMPT children to make space and lie on their bellies around their target.

Let's make space for everyone in your group to lay on your belly around your target.

ENCOURAGE children to blow the cotton balls into the target to form a big "storm cloud."

Try to blow your cotton ball into the target. You can use your breath like a gentle breeze or like a strong gust.

Make all of your clouds come together inside the target! Make a storm cloud!

INVITE children to create rainstorm sounds with their hands once their cotton balls are in the target.

When all of your group's clouds are together, make the sounds of a rainstorm with your hands!

Talk Time

Children think about how others feel using puppets.

Social Emotional: Social Awareness and Relationships

INVITE children to tell how they feel. CONNECT to Power of 3.

Think about how playing that game made you feel. Lean and tell a partner.

Does everyone feel the same way all the time? No, there are lots of feelings we can have, and our feelings change. One way we can take care of each other is by thinking about how others feel, too.

USE Sayeh and Elijah, the social emotional puppets to share different feelings. MODEL thinking about how someone else feels.

Sayeh: I liked creating rainstorm sounds. I feel excited! Do any of you feel excited, too?

Elijah: Not me. I feel differently. Rainstorm sounds scare me. I feel frightened.

Sayeh: Hmm, my friend feels differently than I do. But I care about how he feels. How can I help him?

INVITE children to suggest how Sayeh can be caring toward Elijah. ROLE-PLAY some of their ideas.

When we think about others' feelings, we are being caring. Sayeh cares about Elijah. How can she show him that she cares about how he feels? What can she say or do?

Make & Prepare

- Write numerals on separate index cards. Use numerals your children are familiar with or need to practice.

Additional Materials

- Children's rain sticks
- The book *Rain*

Make & Prepare

- Make a "target" for each group of children using a circle of yarn.
- Plan how to set up and space out the groups around the classroom. For example, you might put the target in the center of four children and have them start blowing from a few feet away.

Additional Materials

- One cotton ball per child

Materials

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

Executive Function

Children at this age are learning that other people have different points of view from them. Talk with them about how other people might see a situation differently or feel differently.

Reflection Time | What is special about clouds and rain?

Children learn about gravity.

Before

CONNECT to the book *Rain*. SHOW the picture on the marked page. THINK ALOUD about how rain falls from the sky.

We read the book *Rain* and thought about how rain falls from the sky. Take a look at the picture on this page [show]. The rhino feels the rain drops as they fall from above and splash down on him.

ENGAGE children in a discussion about other things that fall to the ground and not up to the sky.

- Why do you think rain falls down?
- What other things fall down from the sky to the ground?
- Do things always fall down?
- Do things ever fall up?

DEFINE "gravity." ADD "gravity" 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 on Earth, we have gravity. Gravity pulls things toward the ground [touch the ground]. You can't see it, but that's the reason things fall down. Let's add "gravity" to the list of words we are learning. Do you know any other words that mean the same thing?

During

DRAW a cloud and rain. DESCRIBE what you are doing and thinking as you draw. INVITE children to contribute.

Here is a rain cloud. I want to show the rain falling down. How many drops of rain should I draw?

Suggested message: "Gravity makes rain fall down."

PAUSE to focus on vocabulary (the word "gravity").

I want to write the word that explains why things fall toward the ground. What word do I want to use [encourage children to recall the word "gravity"]? Yes, "gravity" refers to how things fall toward the ground.

INVITE children to reread the sentence with you.

After

SHOW a cup of water. INVITE children to predict what will happen when you turn the cup over.

I have a cup of water. What do you think will happen if I turn the cup over? Where will the water go? Will it float up or fall down? Why?

POUR the water out over a bucket. ASK children to describe what happened.

The water fell down [gesture] into the bucket!

INVITE children to suggest other items to test to see if they always fall down to the ground.

We observed water pour or fall to the ground. I wonder [tap temple], if other things fall to the ground. Here is a basket of items [show]. Who would like to test one out to see if falls down when we gently let go of it?

TEST out a few objects. Then REVIEW the meaning of the word "gravity" again.

Today we learned the word "gravity." Gravity makes things fall to the ground.

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 "gravity" means? Let's rehearse what you might say and do. Tell your partner what the word "gravity" means.

Make & Prepare

- Have the book *Rain* ready. Mark the page that begins "A raindrop splashed," with a sticky note.
- A cup of water (fill it ¼ full)
- A bucket to catch the water
- Gather a collection of small items for children to drop (e.g. a crayon, a glove, a piece of play food).
- Unit Chart: "Words We Are Learning"

Words We Are Learning

gravity: it pulls things toward the ground

Understanding Gravity

Gravity is most easily understood as the force that makes objects "fall." More technically, gravity is the force that attracts objects to one another. The greater the mass of an object, the stronger and farther-reaching the pull. That's why objects are pulled to the surface of the Earth. The Earth has a lot of mass! Mass refers to how much "matter" an object has, which never changes.

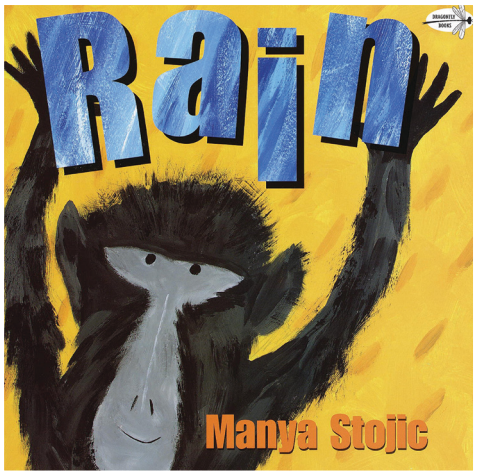
Keep It Going

- While outside on the playground, encourage children to look closely around the trees. Do they notice any nuts or leaves that have fallen from the trees to the ground? Are there any bird feathers that have fallen off a bird flying in the sky or sitting in the tree? Why did they fall from the tree to the ground?
- Bring paper outside and invite children to make paper airplanes and fly them. Challenge children to make a paper airplane that stays in the air as long as possible.
- Work with children in a small group. Discuss how things fall down toward the Earth, but various things fall differently, like a feather versus a toy car. The feather sort of floats down. Invite them to test different objects and observe how they fall. What is making the feather and other objects fall differently? Explorations such as these may lead to other questions that children can test out and build their approaches to learning (curiosity; asking questions, and coming up with ways to find out answers to the questions).

10 Intentional Read Aloud

Literacy: Fluency

Children join in reading repeating words and phrases.



Materials

- Unit Chart: "Words We Are Learning"
- Unit Chart: "What Happens in the Sky?"

Words We Are Learning

gushed: flowed or poured out quickly

Choral Reading

In this lesson, we ask children to read along with the repeating parts. This is called choral reading. Choral reading provides children with the practice needed to build fluency and self-confidence. Choral reading helps the children improve sight vocabulary and pronounce words. By leading the choral reading, you will provide a model for pace and expression.

Did You Know?

Savannas are characterized by their rolling grasslands and isolated trees. There are savannas in several places around the world, though the most famous, and the setting for this book, is the Eastern Africa savanna. The African savanna has a long dry winter season and a very wet summer season. During winter, savannas only get about four inches of rain. In the rainy season, rainfall can measure anywhere from 15 to 25 inches.

Before

REVIEW how rain takes care of plants and animals.

How does rain take care of living things like the plants and animals on Earth?

Yes, rain brings water to the soil. This water helps plants grow. Rain also provides water for animals to drink.

INVITE children to repeat the phrases: "The rain is coming," and "The rain is here." RESTATE how the animals track the rainstorm using their senses.

That is why the animals in *Rain* track the rainstorm. Because rain is so important in keeping them healthy. They say, "The rain is coming!" Can you say that, too? And they say, "The rain is here!" Can you say that, too?

How do they know when the rain is coming and the rain is here? Yes, they use their five senses to track the storm. Each animal uses a different sense to observe the rain.

PROMPT children to repeat "The rain is coming," and "The rain is here." INVITE them to join in reading the animals and their senses.

Today each time an animal says, "The rain is coming" or "The rain is here," let's all repeat it together.

During

REMIND children to listen for and repeat the phrases: "The rain is coming," and "The rain is here."

The porcupine just said, "The rain is coming!" Let's all say it!

PAUSE before reading the name of the animal each time it says, "I must tell the…" TURN to the next page. ALLOW TIME for children to look at the picture and name the animal. For example:

"I must tell the…" [turn the page and wait for children to say "zebras."]

ENCOURAGE children to join in reading the repeating list of animals and senses as it grows.

Pause after "It rained until every water hole was full." DEFINE "gushed." 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).

It rained until every river gushed. Can you say "gushed"? Let's find the syllables or beats in that word: gushed. What does it mean to gush? When the water gushed, it flowed or poured quickly. Let's add "gushed" to the list of words we are learning. Do you know any other words that mean the same thing?

Do you think it took a lot of rain to make the rivers gush, or just a few drops? Why?

After

GUIDE children to create the sounds of a rainstorm using their hands.

The rain is coming! Let's use our sense of hearing and recreate the sounds of a rainstorm using our hands!

RETURN to the Unit Chart: "What Happens in the Sky?" INVITE children to add what they are learning and other questions they have.

Children investigate materials to determine which are absorbent.

Small Group
Science: Physical Sciences
10

Build Interest

HAVE some spilled water on the table. SHOW a sponge and a pencil. ASK children to name which object would be better for cleaning up the spill.

Oh no! Look I spilled some water. Which of these items should I use to clean it up? This sponge [point] or this pencil [show]. Why?

Let's try it!

Build Understanding

SUMMARIZE the discussion.

I heard you say….

DEFINE the word "absorbent."

Sponges soak up liquids like water easily. When a material, like the sponge, soaks up water easily, we say the material is absorbent. Say that with me: absorbent. Let's stand up and count the beats or syllables: ab-sor-bent.

ASK children how they can determine which materials in the collection are absorbent.

Here is a collection of other materials [point]. I wonder how we can find out which ones are absorbent. What could we do?

INVITE children to choose a material from the collection and some tools, such as the tub of water, eye droppers, and spray bottles of water. WORK TOGETHER to test and then determine if this material is absorbent.

- Which material from our collection should we test first?
- Let's predict. Is this absorbent?
- What tool [point] should we use to test it?
- What is happening to the material?
- Is it absorbent?
- How do we know?

Build Experience

GIVE children time to test other materials to determine which absorb water. INVITE children to choose a material, make a prediction, select a testing item, test, and observe.

Let's continue to explore the materials in our collection. We want to find out which ones are absorbent, or soak up water easily. Choose another material and make a prediction if you think it will be absorb water or not. Then select how you will test it, using either the eye dropper or spray bottle of water. Test and observe.

REFLECT on testing the materials to determine which are absorbent.

We are thinking about how some materials, like a sponge, absorb water. We wanted to know what other materials are absorbent. We used eye droppers and spray bottles of water to test. Let's discuss:

- Which materials are absorbent?
- How did you know?
- Did you have any questions as you tested and observed?

DISTRIBUTE science journals. INVITE children to record their thinking.

Make & Prepare

- Download, print, and add a copy of "Absorbing Water" to children's science journals (one per child).
- Collection of materials. Include some that absorb water (cotton balls, paper towel, tissue, etc.) and some that do not (foil, plastic toys, etc.).
- Tub of water (one or two per group)

Additional Materials

- Eyedroppers (one or two per group)
- Spray bottles filled with water (one or two per group)
- Science journals
- Writing tools

Building Background Knowledge

Compare a dry and damp sponge. Refer to the Unit Chart: "We Can Describe."

Stretch Their Thinking

Invite children to sort the absorbent materials from the collection and observe. Ask them what is the same and different about these materials?

Listen/Look For

- What observations and questions do children make as they test the materials with water?
- What descriptive words did they use or need support with in order to explain their observations? Were there any words they confused or misused?
- Were there any actions taken by new English language learners while exploring that needed narrating?

Family Engagement

Invite families to explore absorbency at home. Download and print "Is That Absorbent?" from the *Blueprint* website to send home.

UNIT 9

WEEK 3

Be Sure To…

- ☐ Talk about ways daytime and nighttime are the same and different.
- ☐ Have children explore shadows and make shadow puppets.
- ☐ Introduce the idea that some animals are awake at night.
- ☐ Compare uppercase and lowercase letters.

Materials

- Collection of objects to drop and create "craters" (marbles, ping pong balls, rocks, etc.)
- Flour or sand
- Large cardboard box
- Light source (flashlight, projector, etc.)
- Photo of local meteorologist

Books

- *What the Sun Sees, What the Moon Sees*
- *Max and the Tag Along Moon*
- *One World, One Day*
- *Blueprint Songbook*
- *Blueprint Yoga*

Charts

- Anchor Charts:
  - "Readers Can Say"
  - "Feelings"
  - "Power of 3"
- Unit Charts:
  - "Words We Are Learning"
  - "What Happens in the Sky?"
  - "Ways to Say Hello" (Unit 3)
- Unit Project: Weather Data

How are daytime and nighttime the same and different?

In the day, the sun gives us light and heat. Lots of people and animals are awake and busy. At night, the moon is out. It is cooler and darker. Lots of living things sleep during the nighttime but not all of them!

Children continue learning about the sky. They move above the clouds and learn more about the sun and moon. They compare daytime and nighttime and begin to see it as a cycle. They learn that people all over the world see the same sun and moon. While many people do the same things during the daytime and nighttime (go to school, do chores, etc.), they learn that some animals are nocturnal.

Keep in Mind

- In Week 4, you have two opportunities to invite families into the classroom to celebrate children's learning. They can come listen to the class book and celebrate the learning across the unit. Send out invitations, so families can prepare accordingly. Create your own, or download and print samples from the *Blueprint* website.
- Remember to have the class book completed, laminated, and bound by Day 19.
- Be ready to display and discuss the Unit Project: Weather Data for Day 15: Talk Time.

Words We Are Learning

bustling
busy and moving

orb
sphere

horizon
the line where the sky seems to meet the earth

Multilingual Learner Anchor Words

- day
- night
- sun
- moon

From the Songbook

"Come Outside"

This poem will be featured in Greeting Time. Copy it and send home to families.

Trips & Visitors

Invite family members who work at night to talk to the class about their schedule. What do they notice is different?

Working with Families

Let families know children have been learning about shadows. Encourage them to make finger shadow puppets at home. They can use flashlights (even their flashlight app on their phone) and a nearby wall.

Remember | https://cliblueprint.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 poem about the sun. *Literacy: Literate Attitudes and Behaviors*	Children use sun props to say the poem. *Literacy: Literate Attitudes and Behaviors*	Children use moon props to say a poem about the moon. *Literacy: Literate Attitudes and Behaviors*	Children change the poem to be about stars. *Literacy: Literate Attitudes and Behaviors*	Children choose an object in the sky to say a poem about with a partner. *Literacy: Literate Attitudes and Behaviors*
Movement Time	Children practice a simple sun salute. *Creative Arts: Creative Movement and Dance*	Children do a sun salute and say "hello" and "thank you" in Spanish. *Creative Arts: Creative Movement and Dance*	Children do a moon salute and whisper "hello" and "thank you." *Creative Arts: Creative Movement and Dance*	Children do a star salute and wiggle their fingers like twinkling stars. *Creative Arts: Creative Movement and Dance*	Children choose a salute to do with a partner. *Creative Arts: Creative Movement and Dance*
Talk Time	Children discuss what they know and wonder about the sun and moon. *Science: Earth and Space Sciences*	Children combine the onset and rime in words. *Literacy: Phonological Awareness*	Children add on to a list of things they would bring on a trip to the moon. *Approaches to Learning: Persistence and Attentiveness*	Children role-play what to do when you hurt someone's feelings. *Social Emotional: Social Awareness and Relationships*	Children discuss the results of the unit project. *Science: Earth and Space Sciences*
Message Time Plus	Children change the beginning sound in words to make new words. *Literacy: Phonological Awareness*	Children compare pairs of uppercase and lowercase letters. *Literacy: Phonological Awareness*	Children learn the word "nocturnal." *Science: Life Sciences*	Children play the game "Is this an orb?" *Math: Geometry and Spatial Relations*	Children use the power of observation to search for objects in a picture. *Science: Scientific Inquiry and Practices*
Intentional Read Aloud	Children tell what the sun and the moon would see on Earth. *Science: Earth and Space Sciences*	Children discuss how day and night are different. *Science: Earth and Space Sciences*	Children discuss how the moon reminds Max of his grandpa. *Literacy: Comprehension*	Children make connections. *Literacy: Comprehension*	Children ask "I wonder" questions. *Literacy: Comprehension*
Small Group	Children investigate how heat from the sun changes ice. *Science: Physical Sciences*	Children create craters in a pan of flour. *Science: Physical Sciences*	Children explore how shadows are made. *Science: Physical Sciences*	Children create shadow puppets. *Science: Physical Sciences*	Children design their own astronaut patches. *Science: Engineering and Technology*
Reflection Time	What are you learning about the sun?	What are you learning about the moon?	Do you wish you were nocturnal? Why or why not?	How did you help someone feel better today?	How are daytime and nighttime the same and different?

Centers to Launch

See Pages **14-23**

Art Center | Make Your Own Constellation

Block Center | Build a Spaceship

Math Center | Space Numbers

Science Center | Fix a Flashlight

11 Gathering Times

Literacy, Creative Arts, Science

Greeting Time

Children learn a poem about the sun.

Literacy: Literate Attitudes and Behaviors

SHOW children a picture of a sunny sky (or, if it's a sunny day, look out the window). ASK children to describe the sunshine.

Look at this picture of a sunny sky. What do you see? How does it make you feel?

MODEL reciting "Come Outside." Then INVITE children to recite it and do the actions.

Today we are going to say a poem about being outside on a day filled with sunshine. It goes like this.

Come outside! Let's have some fun
[gesture hands toward you]!
There's enough sunshine for everyone
[open arms out to the sides].
The sun is high up in the sky
[make a circle with arms overhead].
The light is bright, and all is right
[keep arms overhead].
Come outside! Let's have some fun
[gesture hands toward you]!
There's enough sunshine for everyone
[open arms out to the sides].

Can you say the poem with me?

Make & Prepare

- Download and print a photo of the sun.
- Familiarize yourself with the tune of "You Are My Sunshine" on the *Blueprint* website.

Additional Material

- *Blueprint Songbook*

Supporting Multilingual Learners

Explicitly teach the words "sun" and "moon" for new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (using an online translation tool). This will support their comprehension of the thematic content.

Movement Time

Children practice a simple sun salute.

Creative Arts: Creative Movement and Dance

EXPLAIN that a sun salute is a way to greet and thank the sun.

We sang about sunshine. Let's think more about the sun. How does the sun help the Earth? Yes, it gives us light and warmth on Earth. I feel thankful for the sun!

SHOW the sun salute page in the book *Blueprint Yoga*. ASK children what they notice.

Did you know that in yoga there is a special way to greet and thank the sun? It is called a sun salute. Have a look at the sun salute in our yoga book. What do you notice? Yes, when we do a sun salute, we move from one pose to another.

MODEL a sun salute. Then GUIDE children to practice it one to three times.

To do a sun salute, I start standing tall like a mountain.

First, I reach my arms up to the sky. Hello, sun!

Next, I dive down and touch the ground.

Then I stand back up, reaching my arms up. Thank you, sun!

Last, I rest my arms by my sides.

I take a deep breath in and out.

Now it is your turn to greet and thank the sun! Get ready to try a sun salute…

Make & Prepare

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

Additional Material

- *Blueprint Yoga*

Sun Salute

This movement is a portion of a full sun salutation in the yoga practice. The full sequence consists of eight or more poses. Each movement is specifically coordinated with breathing in or out.

Talk Time

Children discuss what they know and wonder about the sun and moon.

Science: Earth and Space Science

SHOW a photo of the sun. ASK children what they know and wonder about the sun. ADD to the Unit Chart: "What Happens in the Sky?"

- Here is a photo of the sun. What do you notice?
- What else do you know about the sun?
- What questions do you have about the sun?

SHOW a photo of the moon. ASK children what they know and wonder about the moon. ADD to the Unit Chart: "What Happens in the Sky?"

There's another object in the sky at night: the moon! Here is a photo of the moon.

- What do you notice?
- What else do you know about the moon?
- What questions do you have about the moon?

ADD sun and moon images to the art center.

Make & Prepare

- Download and print a photo of the moon.
- Unit Chart: "What Happens in the Sky?"

Additional Material

- Image of the sun

Did You Know?

Some children may say they've seen the moon during the day. A brief explanation of this is that there are times when the moon moves into the light from the sun, and it reflects its light brightly enough to be seen during the day.

Keep It Going

- Invite children to make sun and moon puppets. These will be used during Greeting Time.

Reflection Time | What are you learning about the sun?

Children change the beginning sound in words to make new words.

Before

CONNECT to the discussion around the sun and the moon in Talk Time. FOCUS on nighttime.

We are starting to think about the sun and the moon. When I think about the moon, I think about nighttime and going to sleep. What do you like to do before you go to sleep?

All those things sound nice! I like to cozy up with my cat. I like to pat my cat.

INVITE children to compare two rhyming words.

Listen to these two words: pat, cat. What do you notice about them?

Yes, they rhyme. They sound the same at the end. What's different about them? Listen again: pat, cat.

Yes, the first sound in each word is different.

TELL children they are going to practice changing the beginning sound in a word to make a new word.

We are going to change the beginning sound in the word "pat" and make a new word.

Say "pat." Change the beginning sound in "pat" from /p/ to /c/? What's the new word? Cat.

Yes, cat! I like to pat my cat! I'll write about that in the message today!

During

DRAW a picture of your cat. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is a picture of my cat. I'll show it on the bed. Should it be sleeping or looking at us?

Suggested message: "I like to pat my cat."

PAUSE to focus on phonological awareness (changing the /p/ in "pat" to /c/).

I'll need your help with the next word. Say "pat": pat. Change the /p/ in "pat" to /c/. What's the word? Cat! Now I'm ready to write the word.

INVITE children to reread the message with you.

After

ENGAGE children in a phoneme substitution activity. INVITE children to orally change the beginning sound in the word family –at to make a new word. Follow the format below.

We just changed the beginning sound /p/ in "pat" to /c/. We made the word "cat!" When you change the beginning sound in a word, you can make a new word.

Let's try it again and change the beginning sound to make some new words. Listen carefully and think about the beginning sound.

Say "cat." Change the beginning sound in "cat" from /c/ to /m/? What's the new word? "Mat."

CONTINUE to repeat the process for phoneme substitution. SAY the last word created. Then change the beginning sound as follows:

Say "mat." Change the beginning sound in "mat" from /m/ to /b/? What's the new word? "Bat."

Say "bat." Change the beginning sound in "bat" from /b/ to /h/? What's the new word? "Hat."

RESTATE that you can make a new word by changing the beginning sound to a new sound.

Today you changed the beginning sounds in words to make some new words.

REREAD the message one more time.

[Transition] INVITE children to change the beginning sound of their name.

Playing with the beginning sounds in words is fun! Let's try it with our names. Can you change the beginning sound of your name?

Responding to Children

When choosing examples of words to use to reinforce beginning sounds, remember those tricky letters! Children may confuse words that begin with the *letter j* and the soft sound of the *letter g* because these two letters make the same sound. If children identify the correct sound but not the correct letter, support their efforts. You may choose to expand your responses to include, "Yes, I hear that sound, too. In this word, that sound is spelled with the letter…"

Read the Class Book *We Know the Sky*

To celebrate children's writing and to encourage children to continue working on the class book, read what's been written so far.

Personalizing MTP

When writing messages for MTP, try to make them relevant to your classroom. Use your children's names or the names of other people in the building who children know to keep them more engaged.

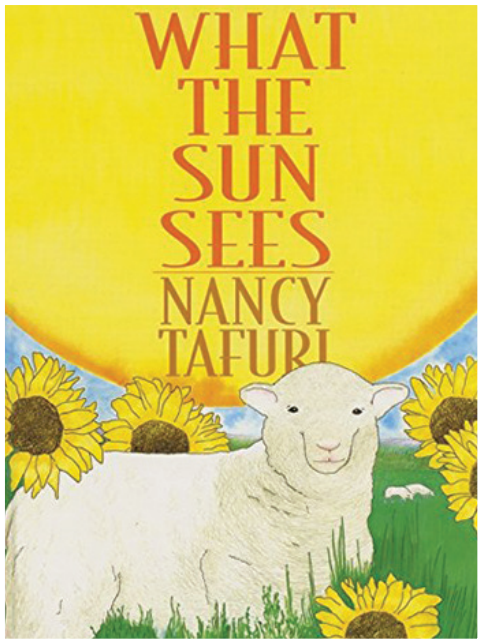
Keep it Going

- During snack, invite children to choose a partner's name. Can they change the first letter? What new name did they make? Encourage them to share with you and their partner.
- Gather children in a small group to build words with magnetic letters. Start with the word "cat." Invite a child to come up and find a magnetic *letter h* and have them change "cat" to "hat." Continue with other *letters f* and *m*. Record the words to show that when you change a beginning letter, you can make a new word.

11 Intentional Read Aloud

Science: Earth and Space Science

Children tell what the sun and the moon would see on earth.



Make & Prepare

- Review the ASL sign for "I see" on the *Blueprint* website.

Additional Material

- Anchor Chart: "Readers Can Say"

Special Format

Highlight for children that this book has a special format. One half is *What the Sun Sees*. Or you can flip it over to read the other half: *What the Moon Sees*. Be sure to clarify that the halves could be read in either order, since each one leads right into the other.

Growing Mathematicians

Looking for and expressing regularity in repeated reasoning is one of the key practices in learning and doing math. The concepts related to the cycles of day and night as well as sun and moon link to this practice.

Supporting Multilingual Learners

Explicitly teach the words "day" and "night" for new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (using an online translation tool). This will support their comprehension of the thematic content.

Before

INVITE children to pretend they are the sun looking down at Earth. PROMPT them to use the sign and sentence stem, "I see."

Can you imagine you are the sun? Pretend to be the sun in the sky. Look down at Earth. What do you see?

If you would like to share what you see, sign, "I see." You can say, "I see…"

SHOW only the cover: *What the Sun Sees*. SET THE FOCUS: To notice what the sun sees.

Today we are going to read a book called *What the Sun Sees* by Nancy Tafuri.

As we read, pretend that you are the sun looking at Earth [mimic looking down]. Notice what you see.

During

Pause after "The sun sees busy children." ASK children to name what the sun can see on Earth. REMIND them to use the sign and sentence stem, "I see."

Think about all the things the sun can see during the day… If you would like to name something you could see if you were the sun, sign "I see." You can say, "I see…"

Pause after "And the sun watches until the moon comes up." CLOSE the book. EXAGGERATE flipping it over to show the new cover: *What the Moon Sees*. INVITE children to view Earth as the moon. CHANGE THE FOCUS: To notice what the moon sees on Earth at night.

This is a special book! Watch as we flip it over to find another cover! This side is called *What the Moon Sees*. As we read this half of the book, now imagine that you are the moon up in the night sky. Look down at Earth. What do you see? If you would like to share what you see, sign, "I see." You can say, "I see…"

Pause after "The moon sees sleeping children." ASK children to name what the moon can see. REMIND them to use the sign and sentence stem, "I see."

Think about all the things the moon can see at night. If you would like to name something you could see if you were the moon, sign "I see." You can say, "I see…"

After

POINT OUT the cycle of day and night. CONNECT the cycle to the special format of the book.

The moon waits for the sun, until night turns to day. And the sun waits for the moon until day turns to night. Day to night, night to day – The cycle just keeps repeating!

Maybe that is why the author, Nancy Tafuri, decided to make this book in a special way. We read about the sun during the day, and then turned it over and read about the moon at night.

We could keep going around and around in a cycle!

Do you think we have to always start with the sun side? Why not?

Next time, why don't we start with the moon side?

Children investigate how heat from the sun changes ice.

Small Group
Science: Physical Sciences
11

Build Interest

SHOW children an ice cube on a plate. GIVE them to time to explore it.

Here is an ice cube! What do you notice about it? What does it feel like? What does it look like?

Build Understanding

SUMMARIZE children's observations.

You noticed…

POSE a question about how quickly an ice cube would melt in the sun.

I wonder…what would happen if we put this ice cube in the sun and kept another ice cube in the shade? Which one would melt faster? What do you predict? Why? How can we test this?

SET UP an experiment with children. Below is one suggested way to organize it but be open to children's ideas. INVITE multilingual learners to share the words they know for "hot," "cold," "ice," "fast," and "slow" as you use these words in your description.

We want to find out if an ice cube in the sun melts faster than an ice cube in the shade. Let's plan how to set up our investigation.

Here are two ice cubes on two plates.

Where should we place the ice cube so that it is in a sunny spot?

Where should we place the other ice cube so that it is in a shady spot?

Build Experience

PLACE the ice in determined locations.

Let's put our experiment ice cube cups in the locations we planned.

DISCUSS how you will monitor the investigation.

- How often should we check the cubes?
- How will we know which melts faster?
- What do you predict will happen?

DISTRIBUTE science journals. INVITE children to record their thinking.

Make & Prepare

- Download, print, and add a copy of "Sun and Ice" to children's science journals (one per child).
- You will need at least three ice cubes for this experiment.

Additional Materials

- Two plates
- Science journals
- Writing tools

Build Background Knowledge

Spend more time sharing experiences in the sun and feeling the warmth the sun provides. Connect to classroom outdoor time where children might have had snack or a Popsicle®. What happens in the sun? What does it feel like to sit in the sun? What if it is cold outside? Does the sun still feel warm?

Stretch Their Thinking

What happens to other things in the sun? Invite children to set up other investigations. Find a sunny spot for a piece of construction paper. Lay objects on top. Check after a few days. Discuss what happens to the color of the paper.

Listen/Look For

- How do children suggest setting up the experiment?
- What do children predict?

Documenting Experiments

Children may be used to photographing their work at this point in the year. Continue to involve them in the documentation process. As you ask them how often they should check on an experiment (in this case, the ice cubes), ask them if they think it is a good time to take a picture. Also, ask them to explain why.

Following Up

Remember to follow up on this investigation. Or invite a child to be "Chief Investigator" whose job can be to remind their group to check the ice cube.

12 Gathering Times

Literacy, Creative Arts

Greeting Time

Children use sun props to say the poem.

Literacy: Literate Attitudes and Behaviors

DISTRIBUTE sun props. PROMPT children to hold them up.

We are talking about the sun and the moon. If you have a sun prop, please hold it up!

Imagine your sun is high in the sky. It is giving us light and warmth down on Earth.

INVITE children to hold their sun props as they recite the poem "Come Outside."

Let's hold our sun props as we say our poem about the sunshine!

Come outside! Let's have some fun!
There's enough sunshine for everyone.
[open arms out to the sides].
The sun is high up in the sky
[hold props up high].
The light is bright, and all is right
[wave props overhead].
Come outside! Let's have some fun!
There's enough sunshine for everyone.

COLLECT the sun props.

Movement Time

Children do a sun salute and say "hello" and "thank you" in Spanish.

Creative Arts: Creative Movement and Dance

MODEL and GUIDE children to do a sun salute.

Why don't we do a sun salute to greet and thank the sun? Let's move together, slowly and smoothly.

Please stand. Reach your arms up to the sky and look up. Say, "Hello!"

Dive down and touch the ground.

Stand back up, reach up, and say, "Thank you!"

Rest your arms by your sides. Take a deep breath in and out.

CHANGE the language of "hello" and "thank you" to Spanish: "hola" and "gracias." GUIDE children to do another sun salute.

People all over the world can salute the sun. Let's use our Unit 3 Chart: "Ways to Say Hello" to greet the sun in a language other than English. Which one should we choose?

Okay, let's say "hello" in Spanish: Hola! Who knows how to say "thank you" in Spanish? Gracias!

Are you ready to greet and thank the sun in Spanish?

Reach your arms up to the sky. Say, "Hola!"...

Talk Time

Children combine onset and rime in words.

Literacy: Phonological Awareness

EXPLAIN that you will play a word game about objects in the sky.

We just greeted and thanked the sun. The sun is one of many objects that we can observe in the sky. Let's play a word game about objects in the sky.

MODEL isolating the onset and rime of the word "sun." ASK children to combine them to make the word.

I'm going to say two parts of a word. Your job is to put the two parts together to make the word. Listen carefully: s-un. What's the word? Yes, sun!

CONTINUE to isolate the onset and rime in other one-syllable words. ASK children to combine them and say the words.

Let's try another one:

- M-oon. What's the word? Moon!
- B-ird. What's the word? Bird!
- St-ar. What's the word? Star!
- Cl-oud. What's the word? Cloud!

There is so much to observe in the sky. Which object is your favorite to observe? Why?

Make & Prepare

- Have children bring the sun props they made. Bring extras for children who did not make one but would like to use one.

Additional Material

- *Blueprint Songbook*

Differentiated Instruction

Incorporating props into activities supports kinesthetic and tactile learners. Other ways you can support these types of learners include role-playing and using gross motor activities to reinforce concepts.

Materials

- *Blueprint Yoga*
- Unit 3 Chart: "Ways to Say Hello"

Highlight Home Languages

We are highlighting saying "hello" and "thank you" in Spanish. However, focus first on languages spoken by children in your class. Invite children to teach you and others the pronunciation. Remember to model being a language learner: show enthusiasm when multilingual children share their languages with you and their friends.

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 "sun" s- is the onset and -un is the rime. Some one-syllable words, such as "ear" and "own," do not have onsets. Teaching children to segment and blend onset and rime will help them to decode and spell later on.

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.

Reflection Time | What are you learning about the moon?

Children compare pairs of uppercase and lowercase letters.

Before

SHOW an image of the sun and a full moon. ASK children to compare.

Here is a picture of the sun. And here is a picture of a full moon. What do you notice? How are they the same? How are they different?

INVITE children to compare the lowercase and uppercase form of the same letter. FOCUS on the uppercase and lowercase *letter s*.

Now let's compare two letters [place letters on board]. What letter is this [point to the uppercase *letter S*]? What letter is this [point to the lowercase *letter s*]?

How are they the same? How are they different?

EXPLAIN that every letter has an uppercase and a lowercase. SUMMARIZE what children noticed about how they are the same and different.

Every letter has an uppercase and a lowercase. This is the uppercase *letter S* [point], and this is the lowercase *letter s* [point]. You noticed they are the same (they both make the same sound, they both have curves, etc.)…. And they are different (one is bigger than the other, etc.)…

Look for an uppercase and a lowercase *letter s* in the message today!

During

DRAW a picture of a sunny day. DESCRIBE what you are doing and thinking. INVITE children to contribute.

I want to draw a sunny day. What would you include in a drawing of a sunny day?

Suggested message: "Sunny days are super!"

PAUSE to focus on concepts of print (forming the uppercase and lowercase *letter s*).

The first word I want to write is the word "sunny." /s/, sunny. "Sunny" begins with the uppercase *letter S*. Since it is the first word in my sentence, I'll write an uppercase *letter S*. I start at the top and curve around and curve around. Now you try writing it with your finger in the air. Let's look for the lowercase *letter s*.

REPEAT with the lowercase *letter s* in the word "super." INVITE children to reread the message with you.

After

INVITE a volunteer to find the uppercase and lowercase *letter s* in the message. DRAW a circle around each of them.

Who would like to come find the uppercase *letter S* in the message? How did you know?

Who would like to come find the lowercase *letter s* in the message? How did you know?

ENGAGE children in a discussion about another pair of uppercase and lowercase letters such as the *letter m*.

Now let's compare two other letters [place letters on board]. What letter is this [point to the uppercase *letter M*]? What letter is this [point to the lowercase *m*]?

How are they the same? How are they different?

REREAD the message one more time.

[Transition] INVITE children to practice the sun salute.

We've been doing the sun salutes in Movement Time! "Sun" and "salute" both begin with the *letter s*. Let's practice our sun salute again!

Materials

- Photos of the sun and moon
- Uppercase and lowercase magnetic *letter s*
- Uppercase and lowercase magnetic *letter m*

Letter Formation

- Uppercase *letter S*: curve around, curve around
- Lowercase *letter s*: curve around, curve around

Interacting with the Message

In this lesson, children were asked to find the *letter s* 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?

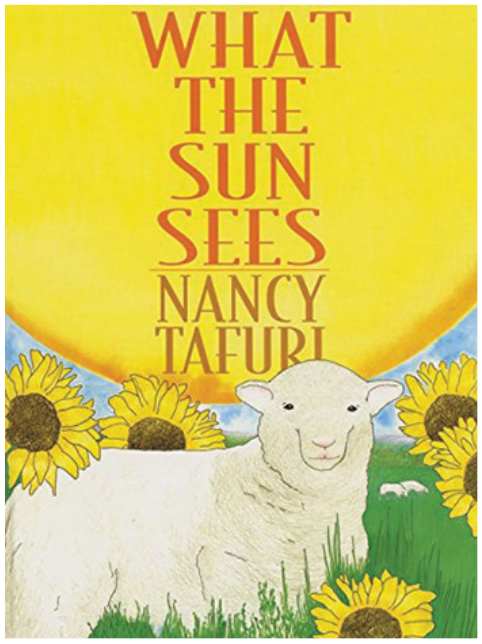
Keep It Going

- Gather children in a small group. Invite them to roll out Play-Doh® or modeling clay. Then hand each child a piece of paper with uppercase and lowercase *letter s* and *letter m* written on it. Invite children to make the shapes of the uppercase and lowercase letters by placing them over the letters on the piece of paper. What do they notice about the shape and size of the letters?
- Invite children to look at their first letter of their name. Do they notice that it is an uppercase letter? Using magnetic letters, invite children to find the uppercase letter first letter of their name. Together find the lowercase letter that matches. What do they notice? How are they similar? How are they different?
- Throughout MTP, you have modeled using uppercase and lowercase letters in your writing and during letter lessons. Continue to notice and point out uppercase and lowercase letters in environmental print and books.

12 Intentional Read Aloud

Science: Earth and Space Sciences

Children discuss how day and night are different.



Materials

- Unit Chart: "Words We Are Learning"
- Unit Chart: "What Happens in the Sky?"

Words We Are Learning

bustling: busy and moving

Did You Know?

This book shows the owl awake at night and asleep during the day. Owls are nocturnal. Children will learn this term and more about this concept in Day 13: Message Time Plus. In addition to nocturnal or diurnal, some animals are crepuscular, meaning they are awake and active during dawn and dusk.

Following Up

Continue to check in on the science investigation you started in Talk Time on Day 7. How has the water changed? What connections can children make to the water cycle?

Before

REVIEW how the special format of the book connects to the cycle of day and night.

Readers, do you recall what is special about this book?

Yes, one half is what the sun sees during the day, and the other half is what the moon sees at night. Just like the day turns to night, and the night turns to day, we could keep reading this book over and over.

ASK children which side we should start with. STATE that we will start with the moon.

Which side should we start with? We could start by reading either side. Today we are going to start with the moon side. Then we are going to flip over the book at read the sun side.

SET THE FOCUS: To notice what is different in the nighttime and the daytime.

As we read, notice what the moon sees at night, and what the sun sees during the day. Think about what is different about the nighttime and the daytime.

During

START with *What the Moon Sees*.

Pause after "The moon sees sleeping children." ASK children how they would describe the nighttime. PAGE back through the pictures. HIGHLIGHT describing words from the book.

Think about what the moon sees at night. How would you describe the nighttime?

Yes, the author, Nancy Tafuri, uses words like: "quiet," "empty," "silent," and "sleeping" to describe the night. In this book, only the owls are awake and hooting. Do you know any other animals that stay awake during the night?

Pause after "And the moon watches until the sun comes up." FLIP over the book to read *What the Sun Sees*.

Pause after "The sun sees bustling streets." DEFINE "bustling." 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).

During the day the sun sees bustling streets. Can you say "bustling"? Let's find the syllables or beats in that word: bust-ling. Have a closer look at this picture… What do you think "bustling" means?

"Bustling" means that a place very busy with lots of moving around. Look at all the people and vehicles that are busy and moving around on this street. It sure is bustling! Let's add "bustling" to the list of words we are learning. Do you know any other words that mean the same thing?

Pause after "The sun sees busy children." ASK children how they would describe the daytime. PAGE back through the pictures. HIGHLIGHT describing words from the book.

Think about what the sun sees during the day… How would you describe the daytime?

Yes, the author uses words like: "crowded," "bustling," "noisy," and "busy" to describe the daytime. Lots of people are awake and active.

After

STATE that you will show a picture from the book. PROMPT children to tell if it is day or night.

Let's play a game with this book! I'm going to hold up a page. Tell if you think it is day or night.

SHOW the page: "The sun sees noisy playgrounds." INVITE children to share their thinking.

Yes, this is a picture of the day. How do you know this something the sun sees?

Let's try another one…

RETURN to the Unit Chart: "What Happens in the Sky?" INVITE children to add what they are learning and other questions they have.

Children create craters in a pan of flour.

Build Interest

SHOW children images of the moon. INVITE them to observe and discuss.

One object that we see in the sky at night is the moon! Here are some pictures of what the moon looks like [show]. What do you notice? Use your power of observation to look for details!

Build Understanding

SUMMARIZE the discussion.

You noticed…

FOCUS on the craters on the moon.

We noticed lots of things that look like bowls in the ground of the moon [point]. These are called craters. Say that with me: craters. Let's count the beats or syllables in that word: cra-ters [touch head, shoulders]. How many beats is that?

Do you know how craters on the moon were formed?

Yes, craters were formed when big rocks crashed into the ground on the moon.

GIVE children an opportunity to see how craters can form. SHOW the materials. CHOOSE one object to drop into the pan of flour. OBSERVE what happens.

Let's investigate how craters are formed. Let's pretend this pan of flour [point] is the ground on the moon. Let's see what happens when we drop different objects [point] into the pan. Which object should we choose first?

How high should we hold it?

Ok, I'll show you how to gently drop the object like this [demonstrate]. Keep your eyes on the pan. What happens to the flour when the object drops?

Let's pick up the object. What do you notice about the shape of the crater?

Build Experience

GIVE children time to take turns dropping different objects into the pan of flour. OBSERVE and DISCUSS the craters they make. ENCOURAGE children to try dropping the objects at different heights.

Let's keep taking turns choosing and dropping a different object into our pan of flour. What shape does each object make?

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

- Gesture: Chose an item to drop. Can you hold it up high? Can you hold it low?
- Yes/No: Is this the object you want to drop? Will it make a crater in the pan? If you hold it [higher, lower], will the crater change?
- Either/Or: Is this the object you want to drop or is this the object you want to drop? Do you want to drop the object from up high or down low? If you hold the object [higher, lower], will the crater it makes change, or will it stay the same?
- Open-ended: How high up should we hold the object? What do you think will happen when you drop the object? What happens if you change how high you hold the object? How do the craters you made compare to the craters in the pictures of the moon?

SUMMARIZE making craters in a pan of flour.

Today we made our own craters in a pan of flour and compared them to the craters on the moon. Let's discuss:

- What shapes did the different objects make?
- What left a big crater? Small crater? Why?
- How were the craters we made similar to the craters on the moon? Different?

DISTRIBUTE science journals. INVITE children to record their thinking.

Make & Prepare

- Create a collection of objects to drop such as marbles, ping pong balls, rocks, etc.
- Download, print, and add a copy of "Craters" to children's science journals (one per child).
- Large pan of flour or sand
- Drop cloth or towels

Additional Materials

- Photos of the moon
- Science journals
- Writing tools

Easy Clean Up

Cover the table or ground with towels to contain any mess from the flour.

Build Background Knowledge

Ask children if they have looked up at the moon. Spend time talking about what they have seen.

Stretch Their Thinking

Invite children to use nonstandard tools to measure the width of the craters and compare them. Which object made the biggest crater? The smallest? Arrange the objects in order of the size crater they made in the pan of flour.

Listen/Look For

- What do children notice as they view the images of the moon?
- What ideas do children share as you set up this experiment?
- What wonderings do they have?

Following Up

Children rely on their senses to learn about their world, but they may not always have the vocabulary to describe what they are thinking. Follow up with children to develop their expressive vocabularies by using robust vocabulary to describe objects and experiences when you play with children.

13 Gathering Times

Literacy, Creative Arts, Approaches to Learning

Greeting Time

Children use moon props to say a poem about the moon.

Literacy: Literate Attitudes and Behaviors

DISTRIBUTE moon props. PROMPT children to hold them up.

We have been saying a poem about the sun. The sun is in the daytime sky. What can we see in the nighttime sky? Yes, the moon! What does moonlight look like?

If you have a moon prop, please hold it up! Imagine your moon is up in the night sky.

CHANGE the poem to be about the moon. INVITE children to hold their moon props as they recite the poem "Come Outside."

Let's change our sunshine poem to be about moonlight! Hold your moon props as we say our poem!

Come outside! Let's have some fun!
There's enough moonlight for everyone.
[open arms out to the sides].
The moon is high up in the sky
[hold props up high].
The light is bright, and all is right
[wave props overhead].
Come outside! Let's have some fun!
There's enough moonlight for everyone.

COLLECT the moon props.

Movement Time

Children do a moon salute and whisper "hello" and "thank you."

Creative Arts: Creative Movement and Dance

MODEL and GUIDE children to do a moon salute.

Let's pretend it is nighttime and the moon is shining in the dark, night sky. How would you like to do a yoga movement to greet and thank the moon? Let's change our sun salute to a moon salute!

Please stand. Reach your arms up to the night sky. Look up and say, "Hello, moon!"

Dive down and touch the ground.

Stand back up and reach up high. Look up and say, "Thank you, moon!"

Rest your arms by your sides. Take a deep breath in and out.

MODEL and INVITE children to whisper "hello" and "thank you" as they do another moon salute.

You can greet and thank the moon at night before you go to sleep. Imagine that it is bedtime now. What kind of voice should we use to greet and thank the moon?

Can you practice whispering "Hello, moon"? Now whisper "Thank you, moon."

Let's whisper as we do this next moon salute…

Talk Time

Children add on to a list of things they would bring on a trip to the moon.

Approaches to Learning: Persistence and Attentiveness

ASK children to share why they would like to travel to the moon.

It's fun to celebrate the moon from here on Earth. Would you like to take a trip to the moon? Why?

EXPLAIN that each person will try to list what everyone has said before them, and add on one more item. MODEL with an adult (or child).

Let's play a game about taking a trip to the moon! We will go around our circle and name what we would bring on the trip.

Listen carefully to what your classmates say. When it is your turn, try to list all the items they said, and then add on one more. Listen as [adult] and I start us off.

I'm going to the moon, and I'm bringing…

GUIDE children around the circle until everyone has had a turn. If a child cannot recall the previous items listed (or the list gets too long), simply start a new round of the game.

Make & Prepare

- Have children bring the moon props they made. Bring extras for children who did not make one but would like to use one.

Additional Material

- *Blueprint Songbook*

Material

- *Blueprint Yoga*

Yoga Pose Cards

Remember, 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.

Executive Function

Recall games, such as the one we play today, help develop children's working memory, a key component of executive function.

Supporting Multilingual Learners

Invite children to name items in their home languages.

Reflection Time | Do you wish you were nocturnal? Why or why not?

Children learn the word “nocturnal.”

Before

CONNECT to learning about daytime and nighttime. REFER to the book *What the Sun Sees, What the Moon Sees*. FOCUS on the owl.

We have been comparing daytime and nighttime. When we read the book *What the Sun Sees, What the Moon Sees* [show], we noticed that the world seems busier during the daytime and quieter for many people at night.

Many people are asleep at night. Do you sleep at night?

But look at this picture of the owl [show]. What do you notice about the owl?

DEFINE: nocturnal. 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).

Yes, the owl is awake. Owls search for food and eat at night. Animals that are awake at night are called nocturnal. Can you say “nocturnal?” Let’s find the syllables or beats in that word: noc-tur-nal. Let’s add “nocturnal” to the list of words we are learning. Do you know any words that mean the same thing?

Let’s keep thinking about other animals that are nocturnal, or awake at night.

During

DRAW an owl. DESCRIBE what you are thinking and drawing. INVITE children to contribute.
Owls are nocturnal. I want to draw an owl. What should I draw?

Suggested message: “Owls are nocturnal animals.”

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

I’m looking for a word that describes animals that are awake at night. What word do I want to use [encourage children to recall the word “nocturnal”]? Yes, “nocturnal” describes animals that are awake at night.

INVITE children to reread the message with you.

After

INVITE a volunteer to find the word “nocturnal” 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 “nocturnal” in the message? How do you know that is the word “nocturnal?” What does it mean?

ENGAGE children in a discussion about nocturnal animals.

We know that owls are one animal that are awake at night. That is when owls are most active!

- What do you think owls do at night when they are awake?
- Do you know other animals that are nocturnal?
- Why do you think some animals are nocturnal?
- Do you think it’s hard to see at night? What special features would nocturnal animals need?

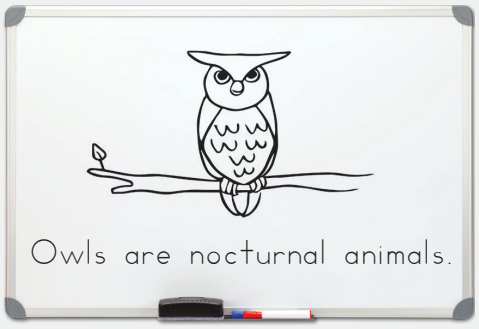
REVIEW the meaning of the word “nocturnal” again.

Today we learned that nocturnal animals are awake and most active during the night time. Owls are one animal that are nocturnal!

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 “nocturnal” means? Let’s rehearse what you might say and do. Tell your partner what it means to be nocturnal.



Make & Prepare

- Have the book *What the Sun Sees, What the Moon Sees* ready. Mark the page that begins “The moon sees hooting owls,” with a sticky note.

Additional Material

- Unit Chart: “Words We Are Learning”

Words We Are Learning

nocturnal: animals that are awake at night

Did You Know?

Other nocturnal animals include bats, beavers, coyotes, crickets, fireflies, hedgehogs, mice, and raccoons. Nocturnal animals have specific adaptations that make them distinct from other animals, such as having a highly developed sense of smell, hearing, and/or sight, and having echolocation or the ability to locate objects using the reflection of sound. In addition, many nocturnal animals are found in desert regions. Being nocturnal allows them to avoid the extreme heat of the daytime temperatures.

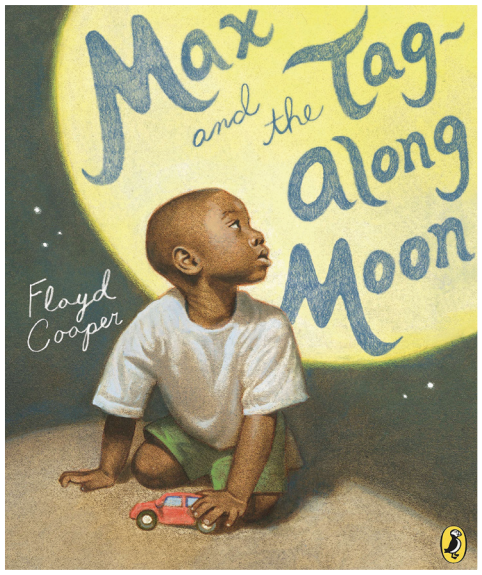
Keep It Going

- Invite children to play a game with you. Around the room, place pictures of nocturnal animals. Turn the lights out and give each child, or a pair of children, a flashlight (it wouldn’t be completely dark because of the outside light which will be helpful for children afraid of the dark). Using the flashlights, find the animals that are nocturnal. Invite children to say the name of the nocturnal animal and, if they can, share something they know about that animal. Pictures can include bats, raccoons, owls, crickets, mice, etc.
- Gather children in a small group. Provide pictures of nocturnal animals and animals that are active during the day. Together read through the pictures of the animals. Invite children to sort the pictures into two columns: nocturnal and animals that are active during the day.

13 Intentional Read Aloud

Literacy: Comprehension

Children discuss how the moon reminds Max of his grandpa.



Material

- Unit Chart: "Words We Are Learning"

Words We Are Learning

orb: sphere

Floyd Cooper

The author and illustrator of this book has a website, https://www.floydcooper.com/ where you can see more images of his book covers and his other art works. His contact information is also listed if your children want to write to him.

Keep It Going

- It takes the moon 27 days to go around (orbit) the Earth. If children are interested, go deeper into the phases of the moon and its orbit (show videos, discuss the waxing/waning of the moon) and then keep track of a 27-day cycle and celebrate one orbit of the moon!
- Meet with children at the art center. Create the phases of the moon. Cut sponges to the waxing/waning phases of the moon and provide ink/paint. Encourage children to map the "movement" of the moon. Add a sun stamp and offer yellow/orange/red paints and inks. Work on a daytime sky mural and a nighttime sky mural.
- Use the one syllable word "moon" to engage children in phonological awareness work. While showing the picture, break the word into its phonemes (/m/, /oo/, /n/) and have children blend it together. Remember, phonemes are the smallest unit of sound. There are more phonemes (24 consonants and 20 vowel sounds) than letters in the English language because many letters make multiple sounds depending on where they are in a word and what other letters are beside them.

Before

SHOW the cover. EXPLAIN what "tag-along" means.

Do you like looking at objects in the sky? Today we are going to read a book about a boy who likes to look at the moon. The title is *Max and the Tag-Along Moon*, written and illustrated by Floyd Cooper.

What does "tag-along" mean? Yes, "tag-along" means to follow or go with someone. If this book is about a tag-along moon, I wonder if the moon is going to follow Max?

ACTIVATE children's thinking about how Max feels about the moon.

Why do you think Max would want the moon to be with him all the time?

Let's read *Max and the Tag-Along Moon* to find out how he feels about the moon.

During

Pause after "Max kept his eyes… to disappear, too." DISCUSS how the moon reminds Max of Grandpa.

How does Max feel about Grandpa? How do you know?

Yes, Max loves Grandpa. They hug each other and look at the moon together. When they say goodbye, they know they will miss each other.

Why do you think Max keeps looking at the moon? Because the moon reminds Max of Grandpa! When he can't be with Grandpa, Max gazes at the moon. He thinks about Grandpa gazing at the same moon, and he feels the love they share.

Pause after "Max giggled… playing peekaboo." DEFINE "orb." 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).

The moon is a beautiful white orb. Can you say that word "orb"? "Orb" is another word for "sphere." What is a sphere? Yes, a sphere is a shape that is round all over like a ball. The full moon is shaped like an orb. Let's add "orb" to the list of words we are learning. Do you know any other words that mean the same thing?

DISCUSS why Max plays peekaboo with the moon.

Why do you think Max is playing peekaboo [demonstrate] with the moon? Yes, the moon reminds Max of how much he loves Grandpa. When he plays with the moon, he can imagine playing with Grandpa.

Pause after "At the mouth… the moon there, waiting." EXPLAIN how the moon was still there although he couldn't see it. CONNECT to his grandpa.

When the car was driving through the tunnel, could Max see the moon? No, so did the moon disappear? Even though Max could not see the moon while he was in the tunnel, it was still up in the sky.

But when Max couldn't see the moon, how do you think he felt? Why? Maybe he felt sad because it made him miss his grandpa even more.

Then when they come out of the tunnel, Max sees the moon again. How do you think that makes him feel? Yes, he feels better because it is like he is with his grandpa again.

After

GUIDE children to imagine a loved one gazing up at the same moon.

The moon makes Max feel close to his grandpa, even when they are far apart.

Can you close your eyes and think of someone you love? Even if you are not in the same place as this person, both of you can gaze at the same moon in the sky.

Children explore how shadows are made.

Small Group
Science: Physical Sciences
13

Build Interest

SHOW the pages you marked in the book *Max and the Tag-Along Moon*. ASK children to share what they know about shadows and how they are made.

We read the book *Max and the Tag-Along Moon*. Let's look through some of the pictures. Do you see any shadows?

- What do you know about shadows?
- How are shadows made?

Build Understanding

SUMMARIZE the discussion.

Some things we know about shadows are… Some shadows we have seen are…

MAKE a shadow with a light source and your fingers (if your room is not dark enough, make the shadow inside a box).

I wonder if we can create a shadow in our classroom. What do we need to make a shadow?

Yes, we need something that will provide light, a light source. Here is a flashlight. It can be our light source.

We also need something to block the light, to create the shadow on the wall or ground. What should we use to make the shadow? Our fingers?

Let's try it!

INVITE children to contribute and describe what is happening.

- Do you see a shadow? What does it look like?
- Who would like to try now?

Build Experience

GIVE children time to make shadows with different objects.

Here is a box of objects. Look through and see if there is something else you would like to use to make a shadow.

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

- Gesture: Point to the light source. Which object will you pick? Hold it to the light. Point to the shadow.
- Yes/No: Is this the light? Is this the shadow? If you move the [light, object], does it change?
- Either/Or: Is this the light, or is this the shadow? If you move the [light, object], does it look the same or does change?
- Open-ended: What do you predict the shadow will look like? Why? What if you change where the light is? What happens? What if you change where the object is? What happens? What else do you want to try?

SUMMARIZE today's investigation of shadows.

We are learning about shadows! To make a shadow, you need a light source and an object. Let's discuss:

- Were you able to create a shadow today? How?
- What happened when you moved the light or the object? Did you bring it closer to the light? Farther away?

DISTRIBUTE science journals. INVITE children to record their thinking.

Make & Prepare

- Have the book *Max and the Tag-Along Moon* ready. Mark a few pages that show shadows (such as the page that begins "Around a tree, past a field of sleeping cows") with sticky notes.
- Download, print, and add a copy of "Making Shadows" to children's science journals (one per child).
- A light source (flashlights, projector, etc.)
- Large cardboard box (if your room doesn't have a place where you can make it dark)
- Collection of classroom objects to make shadows, include a variety of shapes (block, puppet, toy car, etc.)

Additional Materials

- Science journals
- Writing tools

Building Background Knowledge

What do children know about shadows? Do they understand the idea of a light source? If not, linger on this idea for a bit longer, offering examples of light sources (lamps, flashlight, the sun).

Stretch Their Thinking

Introduce transparent objects that do not make shadows. Discuss the difference in materials.

Listen/Look For

- Do children understand that a light source is needed to create a shadow?
- Do children notice and describe that shadows only show the shape of an object, not its color or details?

Safety Tip

Make sure to tell children that, while you CAN look at shadows, you should NEVER look directly at the sun.

Reflecting on the Science Journal

This is the last day that children use science journals during a Small Group lesson. Keep them at the science center for continued use the rest of the year but take time now to reflect on how they were used during Small Group. How did using science journals support your ability to assess and instruct? How would you adapt their use next year? Encourage children to look through their journals. What activities do they remember? How has their skill at recording and responding to activities changed? How would they like to continue to use their journals?

14 Gathering Times

Literacy, Creative Arts, Social Emotional

Greeting Time

Children change the poem to be about stars.

Literacy: Literate Attitudes and Behaviors

ASK children what object in the sky they would like to say the poem about.

We said a poem about the sun and the moon. Would you like to say our poem about the sun or the moon again today? Or a different object in the sky?

Lean and tell a neighbor what you would like to say the poem about today!

AGREE upon an object in the sky. For example, CHANGE the poem to be about stars. MODEL the actions as you say the poem. Then INVITE children to join you.

Why don't we say our poem about starlight?

Come outside! Let's have some fun
[gesture hands toward you]!
There's enough starlight for everyone
[open arms out to the sides].
The sun is high up in the sky
[wiggle fingers overhead].
The light is bright, and all is right
[keep wiggling fingers overhead].
Come outside! Let's have some fun
[gesture hands toward you]!
There's enough sunshine for everyone
[open arms out to the sides].

Can you say this poem along with me?

Movement Time

Children do a star salute and wiggle their fingers like twinkling stars.

Creative Arts: Creative Movement and Dance

ACTIVATE children's knowledge about stars. SHOW image if you have one.

At night have you ever looked up at the stars in the sky? What do you notice about them?

MODEL and GUIDE children to do a star salute, wiggling their fingers like twinkling stars.

Let's do a star salute today! When you reach your arms up toward the stars in the sky, wiggle your fingers like twinkling stars.

Please stand. Reach your arms up to the night sky and wiggle your fingers. Say, "Hello, twinkling stars!"

Dive down and touch the ground.

Stand back up, reach up high, and wiggle your fingers. Say, "Thank you, stars!"

Rest your arms by your sides. Take a deep breath in and out.

MODEL and INVITE children to think of a wish as they do another star salute.

Have you ever made a wish on a star? Think about what you wish for as we do another star salute…

Talk Time

Children role-play what to do when you hurt someone's feelings.

Social Emotional: Social Awareness and Relationships

USE Sayeh and Elijah, the social emotional puppets to act out a conversation in which one hurts the other's feelings.

Sayeh: Elijah, did you make a wish on a star?

Elijah: Yes, I wished that I could have my favorite food. I wished for tacos for dinner tonight!

Sayeh: Ewww, tacos taste so yucky! That's not a very good wish.

ASK children how they think Elijah might be feeling. REFER to the Anchor Chart: "Feelings."

Think about how you would feel if someone said your wish was not good, and your favorite food was yucky. How do you think Elijah is feeling right now? Why?

CONNECT to Power of 3. INVITE children to suggest how Sayeh can take care of her friend's hurt feelings.

Sayeh: Uh oh, it sounds like I hurt Elijah's feelings. But I care about how others feel. That's part of the Power of 3. What can I say or do to fix this problem? How can I help Elijah feel better?

Let's try out some of your ideas. Who would like to be Sayeh? Who would like to be Elijah?

Make & Prepare

- Download and print an image of stars in the night sky.

Additional Material

- *Blueprint Songbook*

Material

- *Blueprint Yoga*

Did You Know?

A star's light is refracted, or bent, through the thick, moving air of the Earth's atmosphere in many different directions, which causes the appearance of twinkling.

Materials

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

Executive Function

Think out loud and model for children how to pause and reflect on your thinking before you act. This modeling will help children develop their own executive function skills.

Reflection Time | How did you help someone feel better today?

Children play the game “Is this an orb?”

Before

ASK children about the shape of a ball. PASS it around the group. COMPARE the shape of the moon to the ball.

Do you know what shape this ball is [pass the ball around]?

Yes, it is a sphere. Say that with me: sphere. The moon is also shaped like a sphere [show image].

FOCUS on the word “orb.” POINT to the word on the Unit Chart: “Words We Are Learning.”

Did you know there is another word that means sphere? It is the word “orb.” An orb is perfectly round all over.

SHOW and READ the marked page in *Max and the Tag-Along Moon*. ASK children to make the “I hear” sign when they hear the word orb.

Say that with me: orb. Let’s count the beats: orb [touch head]. How many beats or syllables in that word? Listen as I read the word “orb” from our book *Max and the Tag-Along Moon*. Make the “I hear” sign like this [demonstrate] when you hear the word “orb.”

TELL children that they will look at shape examples and determine if they are orbs.

The moon is an orb. Today we are going to play a game. We are going to choose shapes out of a mystery bag [show] and ask: “Is this an orb?” You can use what you know about orbs to answer the question!

During

DRAW the mystery bag. DESCRIBE what you are doing and thinking as you draw. INVITE children to contribute.

Here’s the mystery bag. Inside are several different objects. We are going to ask ourselves this question: “Is this an orb?”

Suggested message: “Is this an orb?”

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

I am going to write, “Is this an orb?” Help me count how many words [count and hold up one finger for each word]. Four words! I am ready to write.

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

After

INVITE a volunteer to find the word “orb” 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 “orb” in the message? How do you know that is the word “orb?” What does it mean?

INTRODUCE the mystery bag. INVITE children to select one object and ask, “Is this an orb?” ENCOURAGE them to explain their thinking. SORT the objects into two piles: orbs and not orbs.

We will use what we know about orbs as we look at objects and shapes that we pull out of our mystery bag. Then we can sort the objects into two groups: orbs [point to one yarn circle] and not orbs [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 an orb? How do you know?

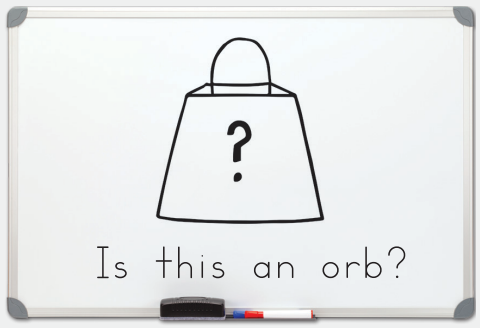
RESTATE that orbs are like spheres; they are perfectly round all over.

Today we looked at several objects and asked: Is this an orb? We sorted the objects. These are all orbs [point]. They are perfectly round three-dimensional shapes. These are not [point].

REREAD the message one more time.

[Transition] TELL children they can create an orb collection at the math center.

We can make an orb shape collection basket at the math center. If you find something that is an orb, add it to our collection!



Make & Prepare

- Create a “mystery” bag and add several examples of orbs and non-orbs.
- Have the book *Max and the Tag-Along Moon* ready. Mark the page that begins “Max giggled as he watched the beautiful bright orb flicker,” with a sticky note.
- Review the ASL sign for “I hear” on the *Blueprint* website.
- Cut two lengths of yarn that are long enough (approximately three feet) to create two circles for sorting.

Additional Materials

- Ball to pass around
- Photo of a full moon

Growing Mathematicians

In this activity, we ask children to explain their thinking. In explaining their ideas, they provide an “argument” based on their evidence and their sorting decisions. For example, “Look. This is an orb because it is round all over!” Constructing viable arguments is one of the key practices in learning and doing math.

Keep It Going

- During snack time, ask, “Does anyone have a food shaped like an orb?” Invite them to share what makes their snack an orb.
- Ask children to analyze new situations against the rules of math that they are learning. For example, in your math center, add three-dimensional objects that are almost like standard orbs such as pine cones, and talk with children about how they are the same and how they are different.

14 Intentional Read Aloud

Literacy: Comprehension

Children make connections.

Make & Prepare

- Review the ASL sign for "I remember" on the *Blueprint* website.
- Optionally, have a globe or a world map to show.

Additional Materials

- The book *Max and the Tag-Along Moon*
- Anchor Chart: "Readers Can Say"
- Unit Chart: "Words We Are Learning"
- *Blueprint Yoga*

Words We Are Learning

horizon: the line where the sky seems to meet the earth

More Information

Peruse the additional information provided at the back of the book. You can read captions for any of the photos in the book. There is also a world map that shows the location where each photo was taken. You can show these end pages to children and use the additional information to answer children's questions and enhance discussion around the book.

Barbara Kerley

On Barbara Kerley's website she has information about herself (and her pets). There is also a teacher's guide for her global awareness books, which contains a section with activities related to *One World, One Day*. barbarakerley.com

Before

STATE that people around the world can observe the sun and moon.

In *Max and the Tag-Along Moon* [show], Max gazes at the moon at night. And what object do we usually see in the sky during the day? The sun! People all over the earth can observe the sun and moon in the sky.

Today we are going to read a book about people in different parts of the world. The title is *One World, One Day* by Barbara Kerley. Look at the front cover. What do you notice?

MODEL making a connection using the sign and sentence stem, "I remember." PROMPT children to sign "I remember" if they make a connection to the book.

In the photo on the cover, this child is walking along a path. He is wearing a backpack. Where do you think he is going? Why?

Maybe he is walking to school. I remember walking into our school building today. I'm making a connection! If you are also making a connection, sign "I remember" [demonstrate].

As we read *One World, One Day*, notice when part of the book reminds you of your own life. You can show that you are making a connection by signing "I remember."

During

Pause after "At dawn, as the sun slips over the horizon." ASK children what they notice about the sky. STATE that the day is beginning. DEFINE "horizon." 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 sky in this photo? It is dawn, or early in the morning, because the sun is just rising. The sun is coming over the horizon [point].

Can you say "horizon"? Let's find the syllables or beats in that word: hor-i-zon. The horizon is the line where the earth and the sky seem to meet. Who can trace their finger along the horizon in this photo? Let's add "horizon" to the list of words we are learning. Do you know any other words that mean the same thing?

Think about what you do in the morning. Let's find out how people around the world start the day.

Pause after "Lots of things taste good for breakfast." PROMPT children to sign and say, "I remember."

Does something in this book remind of your own life? You can sign "I remember." If you would like to share your connection, keep signing. You can say, "I remember…"

Pause after "and slides." INVITE children to turn and talk about their connections. ENCOURAGE them to use the sentence stem, "I remember…"

If you are making a connection, sign "I remember." Turn and talk about it with a partner. When it is your turn to talk, you can start by saying, "I remember…"

Pause after "It's getting dark." EXPLAIN how the day is changing to night.

Have a closer look at this picture. How did the sky change?

Yes, it got darker because the sun set, or went down. The day is changing into night. Think about what you do at night. What might others around the world do at night? Let's read to find out.

After

SUMMARIZE how people around the world can do many of the same things during the day and night.

In *One World, One Day*, we saw photos of people all over the world. Even though we live in different places, we do many of the same things during the day and at night.

INVITE children to do a yoga sun salute. REFER to the book *Blueprint Yoga*.

Many people around the world practice yoga, like we do. Let's do a sun salute together!

Children create shadow puppets.

Build Interest

CONNECT to shadows. INTRODUCE a guessing game. EXPLAIN that you will stand behind the children (so they can't see what you are holding) and hold a shape in front of a light.

We have been learning about shadows. Today we are going to play a shadow guessing game. For this game, I need you to sit facing the screen (or wall), so you can't see me.

I am going to stand behind you with a cutout [show]. I am going to hold it in front of the light so that it blocks the light and makes a shadow on the wall. Look carefully at the shadow. Can you guess what it is?

ASK children to observe the shadow and guess what it is. INVITE children to explain their thinking.

Build Understanding

TELL children they can make their own shadow puppets. GENERATE ideas with children.

We can make our own shadow puppets. You can make any animal or shape that you would like. What do you want to make?

DISCUSS how to make a shadow puppet. WORK TOGETHER to make one.

To make a shadow puppet, we need to think about what we want to make. Next we will draw our idea. Then we will cut it out. We can glue our design to a craft stick, so it is easy to hold in front of the light source. One idea was to make a square shadow puppet.

- How many sides does a square have?
- Who would like to draw it? Cut it?
- What should we do next?
- Let's hold our shadow puppet in front of the light. What do you notice?

Build Experience

GIVE children time to create shadow puppets. Then INVITE children to take turns trying their shadow puppets.

It's your turn to make a shadow puppet. Draw your idea, cut it out, and tape it to a craft stick.

When you are ready, use the light source to try your puppet. Test out what happens when you move the puppet close to the light and then farther away from the light.

SUMMARIZE making a shadow puppet and trying it out.

Today we cut out different shapes to make a shadow puppet. We held our puppet in front of a light source to create a shadow. Let's discuss:

- What do you notice about your puppet's shadow?
- What happened when you moved your puppet away from the light? Closer to the light?

Make & Prepare

- Using paper, cut out some simple shapes for the shadow puppet game in the beginning of this lesson. Try making shapes such as a triangle and/or circle. Then move onto more complex figures like an animal or a fruit.
- A light source (flashlights, projector, etc.)

Additional Materials

- Paper
- Pencils
- Tape
- Craft sticks
- Scissors (regular and also zig-zag and other variations)

Build Background knowledge

Connect to creating shadows in Day 13: Small Group. Invite children to share what the discovered.

Stretch Their Thinking

Invite children to make more complex shadow puppets and have partners guess what they made.

Listen/Look For

- Are children able to work with scissors to cut out their puppet?
- Do children seem to understand that the shadow changes shape depending on its proximity to the light source?

Interacting with Children

Think aloud frequently when working with children no matter what the topic is. When working on shadow puppets, let them know how you are thinking. For example, "I'm thinking about how to make an animal puppet. Should I start by drawing the animal's face or body?"

Keep It Going

- Have children trace each other's shadows on a vertical surface to build their upper body strength.
- Invite children to trace a classmate's shadow with chalk outside. Revisit the shadow at a different times of day. Ask children how the shadow is the same or different from the original chalk outline.
- Set up a light source in a darker area of the classroom. Invite children to use white construction paper or butcher paper to trace shadows of objects. Have them to move the object close to the light source and then farther away and trace the object in both positions. Ask them to think about how and why the outline of the shadow changes.

15 Gathering Times

Literacy, Creative Arts, Science

Greeting Time

Children choose an object in the sky to say a poem about with a partner.

Literacy: Literate Attitudes and Behaviors

REVIEW that we recited poems about the sun, moon, and stars.

We have been saying poems about objects in the sky. What are some things that we said poems about?

Yes, we said poems about the sun, the moon, and the stars. Think about what you would like to make a poem about today…

PROMPT children in partnerships to choose which sky object to make a poem about.

You and your partner will decide which object in the sky to make a poem about. You can choose the sun, the moon, the stars, or something else in the sky. You can even change the actions to match your poem!

ASK children to make their poems in partnerships. Then INVITE them to perform for their classmates.

Stand facing each other and say your poem together!

If you would like to perform your poem, hold hands with your partner 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!

Movement Time

Children choose a salute to do with a partner.

Creative Arts: Creative Movement and Dance

ASK children in their partnership to demonstrate how to do a sun salute.

There are so many things in the sky that we can sing about! Would you like to greet and thank the object that you just sang about with your partner?

Who can remind us how to do a yoga sun salute?

INVITE children in partnerships to choose a salute to do: sun, moon, star, or another sky object.

You and your partner now are going to choose a salute to practice together. You can salute the sun, the moon, the stars, or something else in the sky.

ENCOURAGE children to practice another variation. Make suggestions, such as saying "hello" in a different language.

Let's practice another salute with our partners. This time, choose a different way to do your salute. Maybe choose another object in the sky to greet and thank. Would you like to say "hello" in a different language?

Make a choice with your partner, and then do your salute together!

Talk Time

Children discuss the results of the unit project.

Science: Earth and Space Sciences

REVIEW how meteorologists observe the sky and talk about the weather.

We have been talking about what happens in the sky. Meteorologists like [give name and show photo] pay close attention to what happens in the sky. They observe the weather each day and talk about their observations.

SHOW the display of the Unit Project: Weather Data. DISCUSS the results.

We have been tracking the weather too! Let's take a look at this chart of our observations. What do you notice?

- What kinds of weather did we observe?
- What kind of weather did we observe the most? How do you know?
- Can you think of a type of weather that we did not observe?

INVITE children to talk about the weather.

Who would like to talk about the weather today?

What kind of weather do you think we will have tomorrow? Why?

Make & Prepare

- Decide when and how to form partnerships.

Additional Material

- *Blueprint Songbook*

Keep It Going

- Ask the "audience" members to think about or discuss the performance afterward. What did they like about it? How did they feel?

Material

- *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.

Make & Prepare

- Have the results of the Unit Project: Weather Data ready to display and discuss.

Additional Material

- Photo of meteorologist

Keep It Going

- Encourage children to continue observing the sky and collecting data about the weather. Optionally, create two sets of data to compare. For example, how is the weather in this month the same as and different from the weather in that month?

Reflection Time | How are day and night the same and different?

Children use the power of observation to search for objects in a picture.

Before

RECALL using the power of observation.

We are scientists! One thing scientists do to learn about the world around them, including the sky, is make observations. How do we use our power of observation?

Yes, one thing we do is look closely with our eyes [point] to notice details. When we look closely, we notice different things or different objects that we might not have noticed the first time. We can look closely at the pictures in our books.

SHOW the picture on the page you marked from the book *One World, One Day*. TELL children that they will practice their power of observation. ASK about an object. INVITE children to say if they see the object in the picture.

There are so many things happening here in the book *One World, One Day*! Let's look closely and practice using our power of observation on this page [show].

Do you see flowers? Who can come up and point to them? Do you see food? Who can come up and point to it?

Yes! Both food and flowers are on this page. You had to look closely!

Watch as I write about what we saw using our power of observation.

During

DRAW a picture of a hot dog. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is a hot dog. We noticed this in our picture when we used our power of observation. Should I add any toppings?

Suggested message: "Did you observe a hot dog?"

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

I just finished writing a question. To show that the question has ended, I am going to add a question mark. Watch as I write a question mark. Curve around, drop down, and dot. Now you try writing a question mark with your finger in the air.

INVITE children to reread the message with you.

After

TELL children they will continue to use the power of observation. DISTRIBUTE printed images to partners. EXPLAIN that you will name some items. Children will then see if the item appears in the image and point to it. INVITE children who speak the same home language to share with each other in their home language to solidify and extend their learning.

Let's keep using our own power of observation. With a partner, observe another picture that shows daytime around the world [show]. I'll name something. Search the image. If you see what I name, point to it.

- Does your page show children?
- Animals?
- Flowers?
- Grass?
- Sky?
- Do you see water?

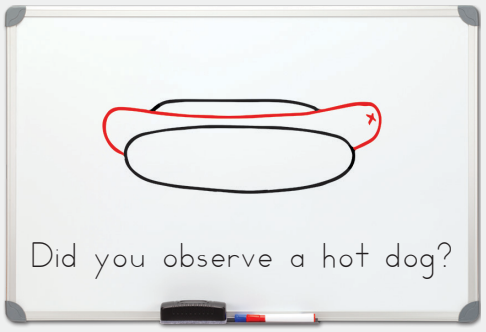
RESTATE the importance of the power of observation.

Today we looked closely at pictures to learn more about them. We strengthened our power of observation! We are becoming skilled scientific observers.

REREAD the message one more time.

[Transition] ASK children to name one thing they noticed with their power of observation.

You used your power of observation today. What was one thing you observed?



Make & Prepare

- Download and print images showing daytime activities (one for each pair of children).
- Have the book *One World, One Day* ready. Mark the page that begins "Kids play with bats and balls," with a sticky note.

Letter Formation

Proper letter formation is important, and stroke directionality develops from consistent teacher modeling. All letters should start at the top and go down. It is easier to write when you start at the top and you can write more quickly. Research has shown that children in later grades with incorrect letter formation take twice as long to finish assignments and tests that require writing. Since it requires more effort to constantly push the pencil upward, their muscles become fatigued, which slows them down even further. This also attributes to negative attitudes toward writing.

Keep It Going

- While reading with children in the library center, encourage them to continue to use their power of observation. Invite them to look closely at the pictures. What do they see? What do they notice happening between characters?
- Join children at the art center. Invite them to share their drawing with you and have them give you clues to find details in their drawing. Were they able to observe their drawing to find details to share? Were they able to come up with a clue?
- Draw children's attention to punctuation in the *Blueprint Songbook*, big books, and other read alouds. Talk about what children notice and how the punctuation mark conveys the message of the sentence.

15 Intentional Read Aloud

Literacy: Comprehension

Children ask “I wonder” questions.

Make & Prepare

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

Additional Materials

- Anchor Chart: “Readers Can Say”
- Unit Chart: “What Happens in the Sky?”

Responding to Children

Some children may wonder about something that seems off topic but is nevertheless important to them. If a child asks a question that seems unrelated to the book, respond to their wondering first, and then ask guiding questions to help them connect their thoughts back to what you are reading. For example, if a child says, “I wonder what I am going to get for my birthday,” talk to them about their birthday. Then connect it back to the book and say, “Do you wonder what [point to a child in the book] got for their birthday?”

Keep It Going

- If children are interested, use the additional information and a world map, such as the one in the back of the book, to locate different countries pictured in the bo*ok Day*.
- Share the author’s letter at the back of the book with children. Talk about why she wrote the book and what she hopes readers will take away from the book. Do children agree with the author’s ideas?

Before

RECAP that people all over the world can observe the sky.

This book *One World, One Day* shows photos of people all around the world. One way we all are connected is that no matter where we live on Earth, we all can observe the sky.

SHOW the cover. MODEL asking “I wonder” questions. INVITE children to share their thinking.

Before we reread this book, let’s take another look at the photo on the cover. The light looks interesting. Hmm, I wonder what time of day it is? I wonder if the sun is just rising in the morning? What do you think?

INVITE children to ask questions. PROMPT them to use the sign and sentence stem, “I wonder.”

When you look at this photo, what else do you wonder? If you would like to share your question, sign “I wonder” [demonstrate]. You can start by saying, “I wonder…”

As we reread *One World, One Day*, think more about what you see in the photos. When you think of a question, you can make the sign for “I wonder.”

During

Pause after “and celebrate a new day.” MODEL asking “I wonder” questions. INVITE children to share their questions. REMIND them to use the sign and sentence stem, “I wonder.”

Look at the children’s shadows on this wall! I see two shadows. But I wonder how many more friends are standing there? I wonder if they are playing a shadow game? What do you think?

When you look at this photo, what else do you wonder? If you would like to share your question, sign “I wonder.” You can say, “I wonder…”

Pause after “any way they can.” MODEL asking “I wonder” questions. INVITE children to turn and talk about their questions. ENCOURAGE them to use the sentence stem, “I wonder.”

These children are going home from school. In this photo, there are a lot of children sitting in one vehicle. I wonder if they all live in the same local community. What do you think?

Think about what else you wonder. Turn and talk with a partner about your questions. When it is your turn to talk, you can say, “I wonder…”

Pause after “Kiss goodnight. Lights out.” INVITE children to ask “I wonder” questions.

What are you wondering about? If you would like to share your questions, sign “I wonder.” Say, “I wonder…”

After

INVITE children to share any lingering wonderings.

As we looked at these different photos in *One World, One Day*, we asked questions about what we were wondering. Is there anything that you are still wondering?

RETURN to the Unit Chart: “What Happens in the Sky?” INVITE children to add what they are learning and other questions they have.

Children design their own astronaut patches.

Build Interest

CONNECT to learning about the sun and moon. ASK children: who travels to space for their job? SHOW the image of the astronaut with patches on their uniform.

We have been talking about the sun and the moon. We see these objects in the sky, but they are very far away in outer space! Do you know whose job it is to travel to outer space to investigate and observe things out there?

Yes, astronauts! Here is a photo of an astronaut. This is Astronaut John Herrington [show]. He has traveled to outer space!

Take a close look at this astronaut's outfit. There are patches on the front [point].

SHOW children images of different astronaut patches. INVITE children to observe and discuss.

Here are other pictures of the special patches that astronauts wear on their spacesuits [show]. Take a look.

- What kinds of pictures do you see?
- What letters or words do you see?
- Why do you think astronauts wear these patches?

Build Understanding

SUMMARIZE children's observations of the astronaut patches.

You noticed…

TELL children that astronauts wear patches for different reasons; sometimes they make new patches when they are about to go into outer space.

Astronauts make and wear patches on their suits. These patches are special because their name can be on their patch. Also, if they are going to the moon, they might add the moon to their patch.

I wonder where you would go if you were an astronaut?

TELL children they are going to design their own astronaut patches.

I have a challenge for you today! Let's design astronaut patches!

DISCUSS ideas with children.

- What are some pictures you might include on an astronaut patch?
- What words might you include on an astronaut patch?

Build Experience

GIVE children time to design and draw an astronaut patch. ENCOURAGE them to talk about their work. INVITE children who speak the same home language to work with each other in their home language to solidify and extend their learning.

Here is some blank paper. How will you design your astronaut patch?

SUMMARIZE the activity. Then INVITE children to share their patch.

Today we designed astronaut patches. Astronauts wear patches on their uniform. These patches tell about their missions or trips to outer space. Who would like to share their design for an astronaut patch?

Make & Prepare

- Download and print a photo of John Herrington. We suggest John Herrington because we will read his autobiography on Days 18 and 19. However, feel free to feature another astronaut of your choice.
- Download and print an image of astronauts with patches on their uniforms.
- Download and print images of astronaut patches.

Additional Materials

- Crayons and markers
- Paper

Build Background Knowledge

Ask children if they have any patches or know anyone who wears them on a coat, vest, bag, etc. Invite them to share. Talk about other occupations where uniforms with patches are worn. Show pictures of these. Some examples are police, firefighters, park rangers, military officers, and certain sports uniforms. Explore the significance of the patches, for instance, how sometimes patches represent rank or commemorate accomplishments or events.

Stretch Their Thinking

Invite children to generate a book about a space mission that tells about their patch.

Listen/Look For

- What do children notice about the astronaut patches?
- What ideas do they have about creating patches?

Did You Know?

A mission patch is created for every shuttle launch! Astronaut crews are in charge of designing their team's mission patch. It usually includes the crew's names and a visual that represents the mission. Not only do astronauts wear these patches on their space suit, but so do other important members of the team, such as trainers and mission control staff.

Vary the Lesson

You can choose to have children create these patches using fabric and paint or fabric markers. Then sew them on old t-shirts like real patches.

UNIT 9

WEEK 4

Be Sure To…

- ☐ Talk about what astronauts do, what they wear, and what it might feel like to travel in outer space.
- ☐ Play games with children that reinforce following directions.
- ☐ Discuss how to respond with empathy in common classroom situations.

Materials

- Painter's tape or plastic shower curtain or tablecloth to create 4x4 grid
- Plastic bags for game pieces

Books

- *Up, Up, Up!*
- *Picture the Sky*
- *Clouds*
- *Rain*
- *What the Sun Sees, What the Moon Sees*
- *Max and the Tag Along Moon*
- *One World, One Day*
- *Hey Ho, to Mars We'll Go!*
- *Mission to Space*
- *Blueprint Songbook*
- Class Book *We Know the Sky*

Charts

- Anchor Charts:
  - "Power of 3"
  - "Cheers"
  - "Readers Can Say"
- Unit Charts:
  - "What Happens in the Sky?"
  - "Words We Are Learning"
- Unit Project: Weather Data

What is it like to be an astronaut?

Astronauts work hard and work together to complete their missions to outer space.

Children conclude their investigation of the sky by learning about space travel. They discover what astronauts do, the equipment they wear and use, and what they can teach us about the Power of 3. They explore how things move differently in space, and they practice moving like astronauts. In Small Group, they participate in an outer space coding grid game.

Keep in Mind

- You will be creating a floor grid game for children to use during Small Group. You can use masking tape to tape directly onto the floor or onto something more portable, such as a plastic shower curtain liner.
- 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

launch
to take off; start a big move

mission
an important trip

Multilingual Learner Anchor Words

- space
- planet
- travel

From the Songbook

"Soaring in the Spaceship"

[Sing to the tune of "Coming 'Round the Mountain."]

This song will be featured in Greeting Time. Copy it 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 Times on Days 19 and 20, if families are present, have them join in GreetingTime and Movement Time! 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.

Let families know you are learning about astronauts. Encourage them to watch videos together of astronauts in outer space. Watching the first moon landing together can be an exhilarating event. They can check out nasa.gov for photos and video clips.

Trips & Visitors

Invite family and community members who work in the aerospace industry to your classroom.

Take a trip to your local planetarium.

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 song about soaring in a spaceship. *Literacy: Literate Attitudes and Behaviors*	Children change the words to "floating in outer space" and pass a wave. *Literacy: Literate Attitudes and Behaviors*	Children change the song to "Walking on the Moon" and sing slowly. *Literacy: Literate Attitudes and Behaviors*	Children change the song to "Looking for Some Moonrocks" and lie on their bellies. *Literacy: Literate Attitudes and Behaviors*	Children change the song to "Blasting Off Again" and pretend to launch. *Literacy: Literate Attitudes and Behaviors*
Movement Time	Children act out blasting off in a spaceship. *Creative Arts: Creative Movement and Dance*	Children practice "zero gravity" jumping jacks. *Physical Development: Gross Motor Skills*	Children practice "moon walk" lunges. *Physical Development: Gross Motor Skills*	Children practice "moon rock" rolls. *Physical Development: Gross Motor Skills*	Children sequence space movements. *Physical Development: Gross Motor Skills*
Talk Time	Children discuss what they know and wonder about astronauts and space travel. *Social Studies: Being a Community Member*	Children practice "Outer Space." *Social Emotional: Self-Awareness and Self-Concept*	Children use empathy to solve a problem with puppets. *Social Emotional: Social Awareness and Relationships*	Children listen to the class book. *Literacy: Listening and Speaking*	Children discuss what they learned in this unit. *Literacy: Listening and Speaking*
Message Time Plus	Children match uppercase and lowercase letters. *Literacy: Phonological Awareness*	Children wonder what it is like for animals that travel to space. *Science: Scientific Inquiry and Practices*	Children learn the word "launch." *Literacy: Vocabulary*	Children identify parts of an astronaut's uniform. *Social Studies: Being a Community Member*	Children discuss how Astronaut John follows the "Power of 3." *Social Emotional: Social Awareness and Relationships*
Intentional Read Aloud	Children notice how people and things float in space. *Science: Physical Sciences*	Children act out and sing along with the book. *Literacy: Fluency*	Children learn about the life of an astronaut. *Social Studies: Being a Community Member*	Children ask "I wonder" questions. *Literacy: Comprehension*	Children vote for their favorite book from the unit. *Literacy: Literate Attitudes and Behaviors*
Small Group	Children play the game "Get the Astronaut to the Space Station." *Science: Engineering and Technology*	Children add an obstacle to the game "Get the Astronaut to the Space Station." *Science: Engineering and Technology*	Children add an activity to the game "Get the Astronaut to the Space Station." *Science: Engineering and Technology*	Children add another activity card to the game "Get the Astronaut to the Space Station." *Science: Engineering and Technology*	Children play the board game version of "Get the Astronaut to the Space Station." *Science: Engineering and Technology*
Reflection Time	If you were an astronaut, where would you like to travel?	How is being in outer space different than being on Earth?	If Astronaut John came to our classroom, what would you ask him?	What is it like to be an astronaut?	What happens in the sky?

Centers to Launch

See Pages **14-23**

Math Center | Dice Building

Writing Center | Asteroid Toss

16 Gathering Times

Literacy, Creative Arts, Social Studies

Greeting Time

Children learn a song about soaring in a spaceship.

Literacy: Literate Attitudes and Behaviors

CONNECT to creating astronaut patches in Day 15: Small Group.

The sun and moon are way up in the sky. They are in outer space. What's the name of a person whose job it is to travel to outer space? Yes, an astronaut, like Astronaut John [show photo]. We created our own astronaut patches!

GUIDE children to hold hands and walk around in a circle. MODEL singing "Soaring in the Spaceship."

Imagine we are astronauts getting ready to soar or fly to outer space in our spaceship [show]! Let's hold hands and walk around it as we sing.

We'll be soaring in the spaceship, yes we will.
We'll be soaring in the spaceship, yes we will.
We'll be soaring in the spaceship,
We'll be soaring in the spaceship,
Yes we will.

PROMPT children to walk in the opposite direction. INVITE them to sing the song.

Now let's go around in the other direction. Sing along!

Movement Time

Children act out blasting off in a spaceship.

Creative Arts: Creative Movement and Dance

ACTIVATE children's knowledge about how a spaceship blasts off.

Astronauts, are you ready for your spaceship to blast off? Have you ever seen or heard a spaceship getting ready to blast off? What did you notice?

What does the blast do for the spaceship? Yes, it pushes it, or forces it up, all the way to outer space.

How would you like to pretend to blast off in a spaceship?

MODEL counting down and blasting off like a spaceship.

I start standing. First, I reach my arms overhead and connect my hands. This is the top of my spaceship. Now I bend my knees to lower my hips a little, as I count back five, four, three, two, one… Then I jump straight up as if shooting up into the sky! Blast off!

GUIDE children to count down and blast off like a spaceship.

Now it's your turn to blast off! Please stand. Reach your arms up and press your hands together like the top of your spaceship. Slowly bend your knees as we count down: five, four, three, two, one… Blast off!

Talk Time

Children discuss what they know and wonder about astronauts and space travel.

Social Studies: Being a Community Member

ASK children what they think they would observe in outer space.

We pretended to blast off into outer space.

- What do you think it is like in outer space?
- What might you observe?

SHOW a photo of John Herrington. ASK children what they know about astronauts.

We know that an astronaut's job is to travel to outer space. Here is a photo Astronaut John. Can you say hello to Astronaut John?

What do you know about astronauts?

ASK children what questions they have about astronauts and space travel.

- What questions do you have about astronauts? What do you wonder about this job?
- What questions do you have about traveling to outer space?

ADD children's ideas to the Unit Chart: "What Happens in the Sky?"

We are going to be learning more about space travel. Astronauts, get ready to blast off!

Make & Prepare

- Familiarize yourself with the tune of "Soaring in the Spaceship" [Sing to the tune of "Coming 'Round the Mountain"] on the *Blueprint* website.
- Download and print an image of a spaceship.

Additional Materials

- Photo of Astronaut John from Day 15: Small Group
- *Blueprint Songbook*

Supporting Multilingual Learners

Explicitly teach the words "space" and "travel" for new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (using an online translation tool). This will support their comprehension of the thematic content.

Material

- Unit Chart: "What Happens in the Sky?

Did You Know?

The terms "spaceship" and "rocket ship" are often used interchangeably. However, technically a vehicle that travels through space is called a spaceship, which is launched with the power of a rocket.

Supporting Multilingual Learners

Humor is one important strategy for lowering language learners' affective filter, no matter what their level of proficiency. Use funny, or even "outrageous," examples to repeat key terms. If children are learning that astronauts travel to outer space, name places they would not go. Ask, would an astronaut fly to the supermarket? To the zoo? That's silly! Astronauts fly to outer space.

Reflection Time | If you were an astronaut, where would you like to travel?

Children match uppercase and lowercase letters.

Before

CONNECT to sharing wonderings during Talk Time. FOCUS on the beginning sound in the word "wonder."

In Talk Time, we shared what we wonder about astronauts and space travel. Say that word with me: wonder. What sound do you hear at the beginning of the word "wonder?"

Yes, /w/. What letter makes the /w/ sound? Yes, the *letter w*.

PLACE several uppercase magnetic letters on the board. INVITE a volunteer to find the uppercase *letter W*.

We are learning that every letter has an uppercase and a lowercase. Here are some uppercase letters [point]. Can you find the uppercase *letter W*? How did you know that was the uppercase *W*?

CLEAR away the uppercase letters. PLACE several lowercase letters on the board.

Here are some lowercase letters [point]. Can you find the lowercase *letter w*? How did you know that was the lowercase *w*?

CLEAR away the letters except for the uppercase and lowercase *letter w*. ASK children to compare them.

You found the uppercase *letter W* [point] and the lowercase *letter w* [point]. What is the same about them? What is different?

I'm going to write about something I wonder about astronauts. Look for the uppercase and lowercase *letter w* in the message today!

During

DRAW a picture of water. DESCRIBE what you are doing and thinking. INVITE children to contribute.

I want to draw water. Should I draw a cup or a water bottle?

Suggested message: "Would an astronaut drink water in space?"

PAUSE to focus on concepts of print (forming the uppercase and lowercase *letter w*).

The first word I want to write is the word "would." /w/, would. "Would" begins with the *letter w*. Since it is the first word in my sentence, I'll write an uppercase *letter W*. I start at the top and slide down. Then I slide up, slide down, slide up. Now you try writing it with your finger in the air. Let's look for the lowercase *letter w*.

REPEAT with the lowercase *letter w* in the word "water." INVITE children to reread the message with you.

After

INVITE a volunteer to find the uppercase and lowercase *letter w*. DRAW a circle around the letters.

Who would like to come find the uppercase *letter W* in our message? How did you know?

Who would like to come find the lowercase *letter w* in our message? How did you know?

ENGAGE children in an uppercase and lowercase letter matching game. PLACE a few uppercase letters across the board and a few lowercase letters. INVITE a volunteer to find a pair of letters that match. ASK children how they know these are the uppercase and lowercase pairs.

Let's find more uppercase and lowercase letter matches! I'll mix up some uppercase and lowercase letters on the board. Who wants to come find a match?

How do we know this is a match?

What is the same about these letters? Different?

REREAD the message one more time.

[Transition] SHOW two letters. Children sign "yes" if it is a match; sign "no" if it is not.

Do these letters match? Sign "yes"[demonstrate] if they do! Sign "no" [demonstrate] if they do not.

Make & Prepare

- Review the ASL signs for "yes" and "no" on the *Blueprint* website

Additional Materials

- Uppercase and lowercase magnetic letter pairs (the *letter w* and others)

Responding to Children

Adjust this activity to meet your children's needs. Some children who are still working to identify pairs of uppercase and lowercase letters will benefit with focusing only on letters whose pairs look similar. If children have more experience with this, include letter pairs that look different (*Aa, Bb, Dd, Ee, Ff, Gg, Hh, Ii, Mm, Nn, Qq, Rr, Tt*).

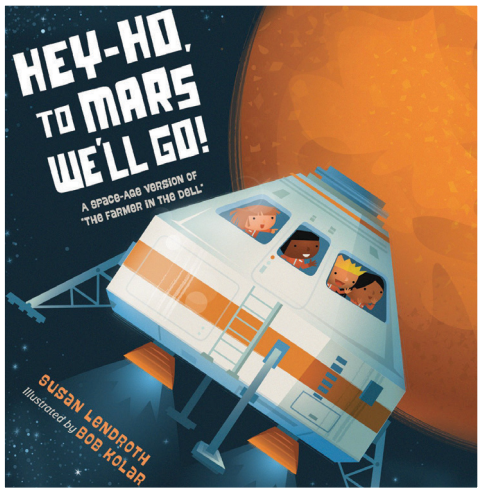
Keep It Going

- Gather children in a small group. Invite them to play a matching game with you. Hand each child an uppercase or lowercase magnetic letter. Encourage them to carefully observe their letter. What do they notice about its shape? Invite them to find a child in the group with the matching uppercase or lowercase letter. What do they notice about the way their letters look? Do they think they look similar? How are they different?
- While reading with children at the library center, invite them to find uppercase and lowercase letters in the book. Do they notice that each sentence begins with an uppercase letter? Point it out to them. Can they find a matching lowercase letter of an uppercase letter they find? Can they find the letter you name or are they naming uppercase and lowercase letters they find?

16 Intentional Read Aloud

Science: Physical Sciences

Children notice how people and things float in space.



Make & Prepare

- Practice singing the book to the tune of "The Farmer in the Dell."
- Bring an object (i.e. a crayon) to drop to demonstrate gravity.

Additional Materials

- Photo of Astronaut John
- Unit Chart: "Words We Are Learning"

Supporting Multilingual Learners

Explicitly teach the word "planet" for new English learners. Use gestures, pictures, and/or directly translate it into the children's home language (using an online translation tool). This will support their comprehension of the thematic content.

Fine Print

The main text can be sung to the tune of "The Farmer in the Dell." In addition, the fine print gives more information about space travel. Read the fine print before the lesson, and use this information to answer children's questions and enhance the conversation around the book. Also, feel free to read select passages of the fine print during the lesson to meet the needs and interests of children.

Before

SHOW the cover. ASK children what they think it would be like to travel to Mars.

Astronauts like John Herrington [show photo] travel to outer space. We are going to read a book about astronauts who travel to another planet. They leave Earth, where we live, and go to Mars. Have you ever heard of Mars?

The title is *Hey-Ho, to Mars We'll Go!* It is a songbook written by Susan Lendroth and illustrated by Bob Kolar. Look at the cover. What do you think it would be like to travel to Mars?

REFER to "gravity" on the Unit Chart: "Words We Are Learning." EXPLAIN that there is no gravity in space.

In outer space there is no gravity. What is gravity [point]?

Yes, gravity pulls things toward the ground [touch the ground] here on planet Earth. If we drop this crayon on Earth, what will happen?

But what if we dropped this crayon in outer space? What would happen?

There would be no gravity to pull it down. Instead it would float in the air. In outer space everything floats because there is no gravity!

SET THE FOCUS: To notice how people and things float in space.

As we read *Hey-Ho, to Mars We'll Go!* notice what is different for the astronauts without gravity. Let's find out more about what it is like travel through outer space.

During

SING the words of the book to the tune of "The Farmer in the Dell."

Pause after "Can you catch my sock?" DISCUSS why they need to catch socks. INVITE children to act it out.

Why do the astronauts need to catch their socks? Why can't they just pick them up off the ground?

Their socks are floating through the air because they are in outer space. There is no gravity to hold their socks down. Even the astronauts are floating in the air!

Pretend our socks are floating too. Stand and freeze like you're reaching for your socks. Now catch them [demonstrate]! Freeze once you catch them, and please sit back down.

Pause after "I squirt myself clean." POINT OUT how the author wrote the words upside down to reflect being in space without gravity. INVITE children to act out catching water.

We need to turn this part of the book upside down to read the words! The author Susan Lendroth wrote the words in different directions—just like people and things that float all different ways in space!

What are the astronauts doing? Yes, even water floats in space!

Stand and freeze like you're reaching for water. Now catch some and wipe it on your arm [demonstrate]. Freeze again, and please sit back down.

Pause after "We sleep on the walls." DISCUSS why the astronauts sleep on the walls.

Why do you think the astronauts are sleeping on the walls? Why can't they just lay down in a bed?

After

INVITE children to act out doing something in space for a partner to guess.

Think about how life is different without gravity in outer space. Turn to a neighbor and act out doing something the astronauts did in space. See if your partner can guess what you are acting out!

Children play the game "Get the Astronaut to the Space Station."

Build Interest

CONNECT to Talk Time and discussing what astronauts do. TELL children they are going to be playing a space coding game.

In Talk Time we talked about astronauts. Astronauts like Astronaut John [show photo] travel to outer space!

Would you like to pretend to be an astronaut?

FOCUS on the 4x4 floor grid that has been prepared. INVITE children to share what they notice about the grid.

Take a look at this large floor grid [point]. We are going to use it to play our space game. What do you notice about this grid?

RESTATE what children say about the 4x4 grid.

You noticed… (e.g., squares, boxes, connected lines).

Build Understanding

EXPLAIN the game "Get the Astronaut to the Space Station."

We are going to use the grid to play the game "Get the Astronaut to the Space Station." We need to go from Earth [point], which is the starting point, to the space station [point] where the astronaut will land.

To play this game, we are going to use these direction cards [hold up cards and show an example of each one]. Each card has an arrow on it. The arrow points in the direction that we will move inside the grid. We will turn over direction cards and then leave the cards in their boxes to create a path, as we move from Earth to the space station inside the grid. Let's try it!

INVITE one child to move in the grid, as other children take turns selecting a direction card and placing it in the squares on the grid. PROMPT them to use direction words (e.g. I just moved forward).

Who would like to be our first astronaut to move inside the grid from Earth to the space station? Please stand on "Earth."

Now we need a direction card. Who wants to start by turning over a card? Please place the direction card in a box on the grid next to the "Earth."

What does the arrow show? Let's have our astronaut move in that direction and stand on the card.

What should we do if the direction card takes us off the grid? Ok, we can say "Oops!" That direction won't work! Let's choose another card.

ASK children to explain or read the directions on the path after they get to the finish.

Look at the path we created with the direction cards. Can you explain it or read it [for example, forward, forward, down, forward…]?

INVITE other children walk in the same path indicated by the cards.

Build Experience

COLLECT the materials from the grid. INVITE a different child to be the astronaut in the grid. PLAY the game "Get the Astronaut to the Space Station" again. READ or explain the code at the end.

Let's play again! Let's collect the game pieces and set it up in a different way. Where should we put the Earth [start card] now? Where should we put the space station [finish card]?

SUMMARIZE that the path is a set of directions. REVIEW the word "code." EXPLAIN that it is the path or set of directions created.

Today we create a path, or a code, with direction cards. A code is a set of directions. The code helped us get from Earth to the space station.

Make & Prepare

- Make a 4x4 grid on the floor with painter's tape, or make a portable grid using a plastic shower curtain liner or tablecloth.
- Create a set of large direction card—use large index cards or sheets of paper to create five cards for each direction: up (arrow up), down (arrow down), backward (arrow left), forward (arrow right). Add a line underneath each arrow, so children know the accurate way to orient the card.
- Create an "Earth" card—write the word "Earth" in green on a large index card or piece of paper. Draw a corresponding picture. Place this in one of the beginning squares of the grid.
- Create a "Space Station" card—write the word "Space Station" in red on a large index card or piece of paper. Draw a corresponding picture. Place this in an opposite place on the grid.

Remember to Save

- Floor grid (to use for coding activities during Small Group)
- All other materials from this lesson

Building Background Knowledge

Review positional words, such as backward/forward, up/down, and side-to-side.

Stretch Their Thinking

Invite children to draw one of the paths that was created.

Listen/Look For

- What are children's understandings of the directions on the card?
- How do children collaborate during this activity?

Robust STEM Activities

This grid activity allows children to use what they know about ordinal numbers, one-to-one correspondence, and positional words. They are also "precoding" activities: activities that serve to introduce children to the concept of coding, which is the language computer programmers use to provide instructions to a computer so it performs a specific task. You will notice that the terms "path" and "code" are used interchangeably throughout these lessons to describe the instructions created with directional cards. Grid games, such as this one, during which children follow directions and take turns, also help their developing executive function skills.

17 Gathering Times

Literacy, Physical Development, Social Emotional

Greeting Time

Children change the words to "floating in outer space" and pass a wave.

Literacy: Literate Attitudes and Behaviors

CONNECT to *Hey-Ho, to Mars We'll Go!* REFER to "gravity" on the Unit Chart: "Words We Are Learning."

We read *Hey-Ho, to Mars We'll Go!* [show book]. When the astronauts are in outer space, how do their movements change?

Yes, in space, there is no gravity [point to word] holding them down. Everyone floats!

GUIDE children pass an arm wave around the circle. CHANGE the words of the song to "We'll be floating in outer space." REPEAT and pass the wave in the opposite direction.

Why don't we pass a slow floating wave around our circle? Hold hands. I'll start by slowly lifting up my arm, and lift the next person's arm like a wave. Then they lift their other arm to pass the floating wave, and we'll go all the way around.

Let's change the words of our song.

We'll be floating in outer space, yes we will.
We'll be floating in outer space, yes we will.
We'll be floating in outer space,
We'll be floating in outer space,
We'll be floating in outer space,
Yes we will.

Now let's pass the wave in the other direction as we sing!

Movement Time

Children practice "zero gravity" jumping jacks.

Physical Development: Gross Motor Skills

STATE that astronauts stay active. REVIEW how to do a jumping jack.

Astronauts need to keep their bodies active. What are some ways you stay active? Lean and tell a neighbor.

One exercise we like to do is jumping jacks. Who can show us how to do a jumping jack?

Let's all do a jumping jack!

ASK children how doing a jumping jack would be different in outer space.

Since there is no gravity in outer space, everyone and everything slowly floats through the air. How do you think doing a jumping jack would be different in space?

MODEL doing "zero gravity" jumping jacks. Then GUIDE children to practice them on each side.

Here is how my jumping jacks might look if I were in outer space. I stand on one leg, and slowly lift my other leg out to the side, as my arms float up. Then I slowly bring my arms and leg back down.

Now it's your turn to do "zero gravity" jumping jacks. Move in slow motion. Here we go…

Talk Time

Children practice "Outer Space."

Social Emotional: Self-Awareness and Self-Concept

ASK children how they feel about the idea of outer space going on forever.

It's fun pretending to be in outer space. I wonder how far out space goes? Some people think outer space is so enormous that it goes on forever and ever!

How does that idea make you feel?

Let's practice a Mindful Moment called "Outer Space" [show card].

GUIDE children to do "Outer Space."

Stand with your feet wide apart and your knees a little bent.

Raise your arms high and spread your fingers wide.

Take a deep breath in. Imagine you are breathing in all the stars and planets in space.

Hold your breath in.

Now slowly bend forward, and let out a long sigh: Ahhh!

Slowly come back up to stand.

How do you feel?

ADD the "Outer Space" card to your Mindful Moment basket.

Materials

- *Blueprint Songbook*
- The book *Hey-Ho, to Mars We'll Go!*
- Unit Chart: "Words We Are Learning"

Differentiated Instruction

Differentiated Instruction is based on the idea that one size does not fit all. Some children learn better by moving around and interacting. Other children are more reticent and shy. Make sure there are spaces in your classroom designated for quiet activities, as well as interactive ones. Your learning environment should make everyone feel safe and positive.

Make & Prepare

- Familiarize yourself with how to do "zero gravity jumping jacks" on the *Blueprint* website. Be ready to model it, or prepare another adult or child to do so.

Use the Calm Corner

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

Make & Prepare

- Download and print the "Outer Space" card.

Mindful Moment

This mindfulness exercise is meant to help children feel more connected with the vast universe. As they imagine inhaling all of the contents of the sky and outer space, it makes them feel that they are also part of the universe. This reminder can give children a powerful sense of belonging and purpose.

Reflection Time | How is being in outer space different than being on Earth?

Children wonder what it is like for animals that travel to space.

Before

CONNECT to learning about astronauts and space travel.

We are learning about astronauts and how they travel to space. We have talked about what astronauts wear and what it is like in space.

TELL children that animals have traveled to space, too. SHOW a picture of Ham the Chimpanzee.

Did you know that animals have traveled to space, too? This is Ham the Chimpanzee [show picture]. He traveled to space a long time ago. He helped astronauts learn things about space travel.

I wonder, what was Ham thinking and feeling as he traveled in the spaceship?

During

DRAW a picture of a chimpanzee. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is Ham the chimpanzee. Do you think he needed a helmet?

Suggested message: "What did Ham think about?"

PAUSE to focus on phonological awareness (combining onset and rime).

Listen to the parts of the word I want to write next. "d"… "id." Put those parts together. What is the word? Yes, "did." Listening carefully to the parts of a word can help you get ready to write it. Watch as I write the word "did."

INVITE children to read the message with you.

After

ENGAGE children in a discussion about animals in space.

Let's think and talk about what it would be like for an animal traveling in space.

- What would the animal need while it was on the spaceship?
- How would a spaceship have to change to bring a lion or elephant to space?
- Do you think it is a good idea to send animals into space? Why or why not?

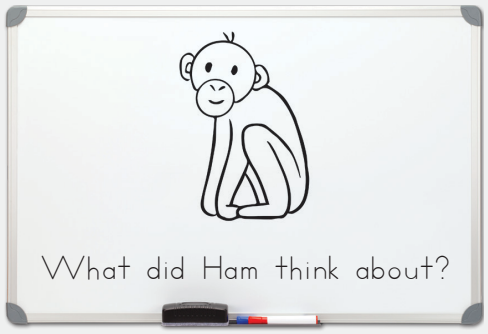
RESTATE that animals have traveled to space, too.

Today we talked about how animals have traveled to space.

REREAD the message one more time.

[Transition] ASK children if there is anything else they wonder about space.

We've been talking a lot about space and astronauts. What else do you wonder?



Make & Prepare

- Download and print an image of Ham the Chimpanzee, who went to space.

Did You Know?

In order to test how safe space travel would be for a human, American scientists decided to first send up an animal. They needed to ensure that important tasks could be performed within a space capsule and that the space suit they had designed would be sufficient protection. Forty chimpanzees were evaluated for a potential space mission. Training involved learning to press buttons inside the space capsule in response to blue, blinking lights. Ham the chimpanzee was selected for his quick learning and fast response times. Ham survived his trip to space and his crash landing in the Atlantic Ocean. He was named after the lab where he trained for his mission, the Holloman Aerospace Medical Center (HAM). Chimpanzees aren't the only animals that have been to space – there have been astronaut dogs, spiders, fish, rodents, and cats, too!

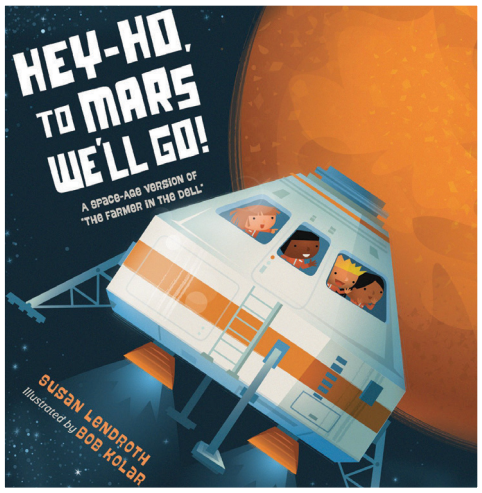
Keep It Going

- Gather children in a small group. Together create a T-chart. On one side of the chart write, Astronaut John, and on the other side write, Astronaut Ham. How are they similar? How are they different? Invite children to share ideas while you write them down on the T-chart.
- Gather children in a small group. Encourage them to think about other jobs that animals do. What are jobs that dogs help with? Horses? Invite them to share what they know about other animals that do a job.

17 Intentional Read Aloud

Literacy: Fluency

Children act out and sing along with the book.



Materials

- Unit Chart: "What Happens in the Sky?"
- Photo of John Herrington
- Unit Chart: "Words We Are Learning"

Words We Are Learning

launch: to take off; start a big move

Connections to Other Units

When we talk about what plants need to grow, we refer back to Unit 7. And when we talk about the importance of keeping our bodies active, we refer back to Unit 2.

Did You Know?

Humans have not yet been to Mars (as of 2020), but lots of scientists are talking about trying to do that in the near future!

Keep It Going

- Show children parts of the tour of the inside of the International Space Station. https://www.youtube.com/watch?v=SGP6Y0Pnhe4. Although the video is not about going to Mars, it is about being in space. There are many real examples from the video that could be shown to children similar to the animated ones shown in the book (e.g. drinking water).

Before

INVITE children to act out and sing along with the book.

Hello, astronauts! Are you ready to take another trip to Mars?

As we reread *Hey-Ho, to Mars We'll Go!* let's act out their trip from Earth to Mars. Please also join in their space adventure by singing along!

During

Pause after "We launch with a ROOOOOAR!" DEFINE "launch." DISCUSS why spaceships are powerful.

The astronauts are launching their spaceship. Can you say "launch"? What does it mean to launch? Yes, "launch" means to blast off or take off! When you launch something, you start a big move.

Why do you think spaceships need to be so powerful?

Yes, it takes a lot of power to get a spaceship off the ground and into the air. Gravity is trying to pull the spaceship back down to Earth. The spaceship needs to push through it.

MODEL and INVITE children to act out blasting off. ADD "launch" 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).

Can we pretend to launch into outer space? Please stand and connect your hands overhead. Bend your knees as we count down: five, four, three, two, one. Now powerfully launch: Blast off!

Let's add "launch" to the list of words we are learning. Do you know any other words that mean the same thing?

MODEL and INVITE children to act out what the astronauts are doing. Use the suggested examples:

- Let's dive through the hatch [swim your arms through space].
- Good-bye, planet Earth [wave your hand].
- Can you catch my sock [grab for an object in the air]?
- I squirt myself clean [catch water and wipe it on your arm].
- We sleep on the walls [zip up a sleeping bag and rest your cheek on your hands].

Pause after "Our greens grow in bags." DISCUSS how plants can grow in space.

How can astronauts grow plants in space? Yes, they keep plants in special bags that hold water. These special lights [point] act like the sun so the plants grow. This spaceship is an "anywhere" farm!

Pause after "Cycling keeps us strong." DISCUSS why astronauts exercise. INVITE children to lay down and pedal their feet in the air.

Why are the astronauts staying active? Yes, they need to take care of their bodies and keep them strong. Since there is no gravity, they can't exercise on the ground. They need special machines to help them.

Imagine you are staying active in space. Make space to lay on your back. Lift your feet straight up in the air. What would it look like if you were about to pedal a bicycle? Freeze in that position. Now pedal your feet like you are riding a bicycle.

After

INVITE children to share what they think could be found on Mars.

Imagine you just landed on Mars. Make sure your helmet is fastened around your head. Your helmet gives you air to breathe while you are on Mars. Close your eyes and begin to explore what is around you on this new planet…

What do you think we could observe on Mars?

RETURN to the Unit Chart: "What Happens in the Sky?" INVITE children to add what they are learning and other questions they have.

Children add an obstacle to the game "Get the Astronaut to the Space Station."

Build Interest

EXPLAIN that astronauts might encounter obstacles. SHOW children the image of an asteroid. INVITE them to discuss what they would do if their path crossed with the asteroid card.

When astronauts are in space, they can run into problems they have to solve! Sometimes, they encounter other space objects that get in their way. They are obstacles. This is a space object an astronaut might see [show image]. It is an asteroid. Do you know what an asteroid is?

Yes, it is a big space rock. What would you do on your path if you ran into this obstacle?

Build Understanding

TELL children they are going to play the coding game "Get the Astronaut to the Space Station" again but with an obstacle. DISCUSS what children want to do if the direction cards take the astronaut to the asteroid.

Let's use our big floor grid again [point] and play "Get the Astronaut to the Space Station." Be careful astronauts; we are going to add the asteroid. Let's make sure we help our astronauts go around the asteroid.

INVITE children to add the "Earth," "space station," and "asteroid" cards to the floor grid.

Where should we put Earth? How about the space station?

Here's what we have to watch out for – the asteroid. Where do you want to place it? Remember, if the astronaut's path goes near it, we need to help create a path around it.

INVITE one child to move in the grid, as other children take turns selecting a direction card and placing it in the squares on the grid. PROMPT them to use direction words (e.g. "I just moved forward").

Who wants to be our first astronaut, moving inside the grid, from Earth to the space station? Please stand on "Earth."

Who wants to turn over a direction card? What does the arrow show?

Where are you now, astronaut? Will the astronaut's path go near the asteroid?

What should we do if the direction card takes us off the grid? Ok, we can say "Oops!" That direction won't work! Let's choose another card.

Which direction card do we need to get to the finish?

After the child makes it to the space station, INVITE the other children to walk in the same path, as indicated by the cards. ASK them to read the code.

Build Experience

COLLECT the materials from the grid. PLAY the game again. READ or explain the code at the end.

Who wants to play the game again? Let's collect the game pieces and set it up in a different way. Where should we put the Earth [start card] now? Where should we put the space station [the finish card]? Where should we put the obstacle [the asteroid]?

SUMMARIZE adding an obstacle to the board.

Today we followed a code, a set of directions, to get the astronaut to the space station again. The code helped us get from Earth to the space station without running into an asteroid! Way to go astronauts!

Make & Prepare

- Create an "asteroid" card—write the word "asteroid" on a large index card or piece of paper. Draw a corresponding picture.

Additional Materials

- 4x4 floor grid or portable grid
- Direction cards
- "Earth" and "space station" cards

Building Background Knowledge

Warm up to the directions! Show different direction cards and invite children to move accordingly.

Stretch Their Thinking

Expand the grid! Make the grid larger by adding another row and column of squares.

Listen/Look For

- How do children respond when they get close to the obstacle?
- How do children work to get around the obstacle?

Growing Mathematicians

Using tools strategically is one of the key practices in learning and doing math. Coding can be thought of as a tool. In computer programming, codes are sets of instructions that tell a computer what to do. Here, children are learning how codes like this work (like if/then statements and the logic of 0s and 1s). Hopefully, children will eventually be able to use codes as a tool to reach a goal.

18 Gathering Times

Literacy, Physical Development, Social Emotional

Greeting Time

Children change the song to "walking on the moon" and sing slowly.

Literacy: Literate Attitudes and Behaviors

REFER to *Hey-Ho, to Mars We'll Go!* ASK where else astronauts could land in space.

The astronauts in *Hey-Ho, to Mars We'll Go* [show book] land on the planet Mars. Where else do you think astronauts could land in space?

Some astronauts like Astronaut John [show photo] have landed on the moon. What do you think it feels like to walk on the moon?

GUIDE children to lay down and pretend to walk slowly on the moon.

Can we pretend to walk on the moon? Make room and lay down. Lift your feet straight up in the air and freeze in that position. Remember, there is no gravity, so we need to move slowly. Now move your feet in slow motion.

CHANGE the words of the song to "We'll be walking on the moon." SING at a slower pace.

Let's sing about walking on the moon. Sing slowly to match our slow movements.

We'll be walking on the moon, yes we will.
We'll be walking on the moon, yes we will.
We'll be walking on the moon,
We'll be walking on the moon,
We'll be walking on the moon,
Yes we will.

Movement Time

Children practice "moon walk" lunges.

Physical Development: Gross Motor Skills

INVITE children to imagine they are on the moon and want to walk to a crater.

Moving in space seems to happen in slow motion. What if you were an astronaut who just landed on the moon? Imagine you want to walk to a crater over there [point]. Can you just walk over like this [demonstrate normal walking]?

MODEL "moon walk" lunges. GUIDE children to practice lunging.

On the moon, you would take big, slow steps. Watch as I lunge as if walking on the moon.

First, I take a big, slow step forward. When my foot touches the ground, I bend my knee deeply. My back leg is stretched long. Next, I pick up that back foot, and take another big, slow step forward...

I can keep doing these "moon walk" lunges until I get over to the crater.

Now it's your turn to practice doing "moon walk" lunges…

INVITE children to practice lunging (take more steps, try it backward, etc.).

Talk Time

Children use empathy to solve a problem with puppets.

Social Emotional: Social Awareness and Relationships

USE Sayeh and Elijah, the social emotional puppets to talk. PRESENT a problem.

Sayeh: Those "moon walk" lunges make me feel excited to play with my new astronaut toy!

Elijah: Can I play with your astronaut toy, too?

Sayeh: Friends, I have a problem. Last time I let Elijah use my toy, he broke it. So I don't want to share my new toy with him this time.

DISCUSS each puppet's feelings. ASK children to share solutions that show empathy. INVITE them to hold the puppets as they act out their ideas.

- How do you think Sayeh feels?
- How do you think Elijah will feel if Sayeh says he can't play with her toy?
- What should Sayeh do?
- Who wants to hold Elijah and Sayeh and show us what they would do?

CONNECT to the Power of 3.

When we think about how others feel, we are taking care of each other. That's part of our Power of 3.

Materials

- *Blueprint Songbook*
- The book *Hey-Ho, to Mars We'll Go!*
- Photo of Astronaut John

Keep It Going

- Show children videos of astronauts landing on the moon. https://www.youtube.com/watch?v=w4wx_3XOrns

Make & Prepare

- Familiarize yourself with how to do "moon walk" lunges on the *Blueprint* website. Be ready to model, or prepare another adult or child to do so.
- Figure out the best space for children to practice "moon walk" lunges. They should have enough room in front of them to take one or more large steps forward. You may need to move off the rug or try it in smaller groups.

Materials

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

Empathy

Empathy is more than simply identifying another person's feelings. In today's Talk Time we encourage children to think about a situation from another person's perspective: Why might they feel this way? How would this action make them feel? This type of reflection guides children to make more thoughtful decisions about how to respond to situations in their lives.

Reflection Time | If Astronaut John came to our classroom, what would you ask him?

Children learn the word “launch.”

Before

CONNECT to learning about astronauts. FOCUS on the word “launch.” POINT to the word on the Unit Chart: “Words We Are Learning.”

We are talking about astronauts and how they explore space. Let’s think about how astronauts get to space. What do they need?

Yes! A spaceship. After the astronauts board their spaceship, it launches [point to the word on the chart] into space. Say that with me: launch. Let’s count the beats: launch [touch head]. One!

SHOW and READ the marked page from *Hey-Ho, to Mars We’ll Go!* INVITE children to make the “I hear” sign when they hear the word launch.

Look at the picture and listen as I read a page from our book, *Hey-Ho, to Mars We’ll Go!* Make the “I hear” sign like this [demonstrate] when you hear the word “launch.”

INVITE children to view the page from the book and describe what they see.

What do you see in the illustration that shows that the spaceship is launching into outer space?

Yes, the flames [point] show that the spaceship has launched. Let’s keep thinking about the word “launch.” Look for it in the message today.

During

DRAW a spaceship lifting off the ground. DESCRIBE what you are thinking and drawing. INVITE children to contribute.

Here is a spaceship. It is about to launch. What can I draw to show it blasting off?

Suggested message: “We see the spaceship launch.”

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

I want to write the word that means to start a big move or blast off. What word do I want to use [encourage children to recall the word “launch”]? Yes, “launch” means to start a big move or blast off.

INVITE children to reread the message with you.

After

INVITE a volunteer to find the word “launch” 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 “launch” in the message? How do you know that is the word “launch?” What does it mean?

INVITE children to imagine they are a spaceship waiting to launch. MODEL and GUIDE children to count down and launch like a spaceship.

Please stand. Reach your arms up and press your hands together like the top of your spaceship. Slowly bend your knees as we count down: five, four, three, two, one… Launch!

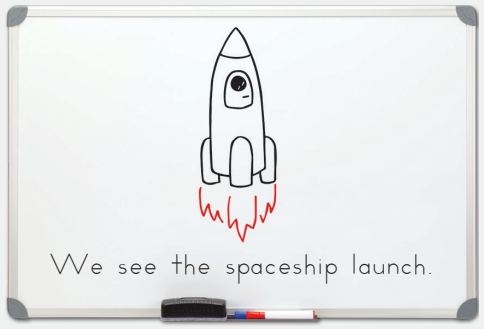
REVIEW the meaning of the word “launch” again.

Today we learned the word “launch.” When you launch, you take off! Just like a spaceship.

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 “launch” means? Let’s rehearse what you might say and do. Tell your partner what the word “launch” means.



Make & Prepare

- Have the book *Hey-Ho, to Mars We’ll Go!* ready. Mark the page that begins “We launch with a roar,” with a sticky note.
- Review the ASL sign for “I hear” on the *Blueprint* website.

Scaffolding in MTP

We often encourage you to 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.

Vocabulary Development

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

Supporting Language Development

This message contained a compound word (spaceship). Compound words are words that are made up of two (or more) smaller words that combine to make a new word with a new meaning. Develop children’s understanding of these words through word play. For example, give children two small words, such as “sun” and “light” and ask them to combine them to make a new word. Or, do the opposite. Say the word “sunlight” and ask children to remove the word “sun.” What word is left?

Keep It Going

- Launch a balloon. Blow it up and, together, count down from five and let it go!

18 Intentional Read Aloud

Social Studies: Being a Community Member

Children learn about the life of an astronaut.

Materials

- Photo of Astronaut John
- Unit Chart: "Words We Are Learning"

Words We Are Learning

mission: an important trip

Genre

A biography is a book that tells about a person's life. An autobiography is a biography written by the person whose life the book is about. Since John Herrington himself wrote *Mission to Space*, it is considered an autobiography.

Did You Know?

John Herrington is a proud citizen of the Chickasaw Nation. When he joined the crew of the space shuttle Endeavour in 2002, Herrington became the first enrolled member of a Native American tribe to travel to space.

Avoiding Stereotypes

When deciding what materials and books to share with children, take care not to reinforce stereotypes. For example, seek out books that feature Native Americans in contemporary life as this book does instead of only featuring historical or ceremonial images of Native peoples.

Before

ASK children if they would like to be astronauts.

Do you think that you would like to be an astronaut? Why or why not?

SHOW photo of Astronaut John. INTRODUCE the genre of autobiography.

Here is a photo of one famous astronaut. Do you remember his name? Yes, this is John Herrington. Astronaut John wrote a special book about his life. A book someone writes about their life is called an autobiography. Can you slowly say "autobiography" with me?

SHOW the cover. DEFINE "mission." 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).

The title of John Herrington's autobiography is *Mission to Space*. Look at the cover. Can you say "mission"? Have you ever heard that word before? What is a mission?

A mission is an important trip. In this book, we will find out about an important trip to space. Let's add "mission" to the list of words we are learning. Do you know any other words that mean the same thing?

TAKE a picture walk. INVITE children to briefly comment on the photos.

Before we read *Mission to Space*, let's take a picture walk. Look at the photographs! What do you notice about Astronaut John?

SET THE FOCUS: To think about what it is like to be an astronaut.

Now let's read *Mission to Space* to learn about John Herrington's life as an astronaut.

During

Pause after "It takes a lot of hard work to do something well." CONNECT to Power of 3.

What does Astronaut John tell us about being an astronaut?

Being an astronaut takes a lot of hard work! John did a lot of training, or practice, to get ready to fly to outer space. I bet that hard work can feel challenging at times. But did Astronaut John give up? No!

How did he take care of himself? He kept on trying! He must have said, "I can do it!"

Pause after "It protects our eyes from the bright light of the sun." ASK how the spacesuit helps him.

When he is in outer space, Astronaut John wears a spacesuit. How do the suit and helmet help him do his job?

The spacesuit protects his body from the air if it gets too hot or too cold in space. The helmet gives him air to breathe as he explores. It also has a visor on it to protect his eyes from the bright light of the sun.

Pause after "We have successfully landed back on Earth." EXPLAIN the phrase "Mission accomplished!"

The astronauts landed back on Earth. They completed their important trip, or mission, to space. When astronauts successfully complete, or accomplish, their mission, they might say, "Mission accomplished!" Can you say that?

After

DISCUSS what it is like to be an astronaut..

We just read an autobiography about the life of John Herrington. What is it like to be an astronaut?

Children add an activity to the game "Get the Astronaut to the Space Station."

Build Interest

CONNECT to using the large floor grid. SHOW children the new cards that will be added. INVITE them practice the activity on the cards.

Let's use our floor grid again today. We are working to create codes to get astronauts from Earth [show] to the space station [show]. We added an asteroid to the grid [show]. That was an obstacle we astronauts had to get around. We didn't want to hit the asteroid!

But today, we are going to add an activity! If you land on it, it's fun!

Here is the card [show]. What do you notice?

Yes, it is a heart. Astronauts have to stay in good shape, or keep healthy, when they are in space. If your code takes you to the heart, you will stop to exercise like an astronaut. What is one exercise we know astronauts do? Yes, jumping jacks, like this [demonstrate]! Let's all stand and practice a few zero-gravity jumping jacks.

Build Understanding

WORK TOGETHER to set up the grid. BRIEFLY REVIEW the cards as you add them.

Now that we have practiced our new activity, let's get the grid ready! Where should we put the:

- Earth
- The space station
- The asteroid
- The heart

INVITE an astronaut to follow directions and move through the grid. INVITE the rest of the group to help turn over direction cards to create a path. DISCUSS what to do if children move off the grid, turn onto the obstacle, or land on the activity card. INVITE children to explain or read the directions on the path after they get to the finish.

Look at the path we created with the direction cards. Can you explain it or read it [for example, forward, forward, down, forward…]?

Did we encounter the asteroid? What did we do?

Did the astronaut land on the heart? What happened?

ENCOURAGE other children walk in the same path indicated by the cards.

Build Experience

COLLECT the materials from the grid. PLAY the game again. READ or explain the code at the end.

Now we can play again! Let's collect the game pieces and set it up in a different way. Where should we put the Earth [start card] now? Where should we put the space station [the finish card]? Where should we put the obstacle [the asteroid]? Where should we put the heart [activity card] now?

SUMMARIZE adding an activity to the grid.

Wow! We are really learning a lot about creating codes. Our code today took the astronaut from Earth to the space station. We have several cards on the board that change up the game.

Make & Prepare

- Create a "Heart" activity card—draw a heart on a large index card or piece of paper.

Additional Materials

- 4x4 floor grid or portable grid
- Direction cards
- "Earth" card; "Space station" card; "Asteroid" card

Building Background Knowledge

Review all the materials and cards used for the coding games.

Stretch Their Thinking

Invite children to make new activity cards.

Listen/Look For

Do children recall what to do for the different cards as they play the game?

Adapt the Lesson

Some children may just prefer to play the game the way it was initially introduced (without adding the extra cards).

Learning Through Play

Remember coding helps children prepare to think like computer programmers. But at this age, children don't need a computer to learn how to code. Rather, they learn best though play and games like the one in these activities.

19 Gathering Times

Literacy, Physical Development

Greeting Time

Children change the song to "Looking For Some Moonrocks" and lie on their bellies.

Literacy: Literate Attitudes and Behaviors

ASK children what they could observe on the moon.

Some astronauts have landed on the moon. If you landed on the moon, what do you think you might see?

MODEL and GUIDE children to lie on their bellies and pretend to look for moonrocks.

Sometimes astronauts find rocks on the moon. Some astronauts have brought moonrocks back to Earth!

Let's pretend we are on the moon looking for rocks. Get closer to the moon's surface by lying on your belly (you can prop up on your elbows). Imagine you are floating. Look through your helmet for some moonrocks.

CHANGE the words of the song to "We'll be looking for some moonrocks."

Ready to sing about looking for some moonrocks?

We'll be looking for some moonrocks,
yes we will.
We'll be looking for some moonrocks,
yes we will.
We'll be looking for some moonrocks,
We'll be looking for some moonrocks,
We'll be looking for some moonrocks,
Yes we will.

Movement Time

Children practice "moon rock" rolls.

Physical Development: Gross Motor Skills

MODEL rolling side to side and back and forward.

Did you find some moonrocks? How would you like to bring them back down to Earth?

I wonder what it would feel like to be a moonrock on a spaceship flying back to Earth. Let's pretend!

First, I lay down on my back and bend my knees. Next, I hold onto my legs to curl up in a ball. Then I can rock all the way to one side and the other.

How else could I move?

Yes, I can also try rocking back and forward.

GUIDE children to do "moon rock" rolls.

Now it's your turn to roll like a moonrock! Lay on your back and hug in your knees to your chest. Can you rock side to side a few times?

How about back and forward? Can you rock all the way up to sit?

Can you think of another way to move like a moonrock?

Talk Time

Children listen to the class book.

Literacy: Listening and Speaking

CONNECT to learning about what happens in the sky. READ the class book.

We have been thinking and talking about what happens in the sky. You have become sky experts!

Each of you wrote about a page in our class book *We Know the Sky*. Let's read to find out what we know…

PAUSE one to three times. ASK children what they learned. ENCOURAGE them to use the sign and sentence stem, "I learned."

Are you learning even more about the sky from our class book? If you would like to share, you can sign "I learned" [demonstrate]. You can say, "I learned…"

What interesting information you drew and wrote about!

CLOSE with a cheer.

Let's celebrate our class learning with a cheer. Who would like to choose one from our cheer chart?

Material

- *Blueprint Songbook*

Transitions

Transitions can be tricky. The choice principle offers you a way to interact with children in a positive manner. Give children two choices, both of which are positive and responsible. "Would you rather tiptoe or hop over to the carpet?" Children will feel empowered.

Make & Prepare

- Familiarize yourself with how to do "moon rock" rolls on the *Blueprint* website. Be ready to model, or prepare another adult or child to do so.

Did You Know?

The United States' Apollo 11 Mission carried the first geologic samples from the moon back to Earth in 1969.

Make & Prepare

- Have the completed class book *We Know the Sky*. Review the ASL sign for "I learned" on the *Blueprint* website.

Additional Materials

- Anchor Chart: "Readers Can Say"
- Anchor Chart: "Cheers"

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.

Reflection Time | What is it like to be an astronaut?

Children identify parts of an astronaut's uniform.

Before

CONNECT to learning about Astronaut John's job. SHOW the marked page from *Mission to Space*. NAME different parts of an astronaut's uniform.

When Astronaut John is on a space mission [show cover], he wears a uniform! An astronaut's uniform has different parts. Each part does something important. Let's take a look at some of the parts of an astronaut's uniform [show marked page]. What do you notice?

Yes, there are many parts of an astronaut's uniform. We noticed the:

- Helmet [point] – it protects the head while allowing them to see as much as possible
- Space suit [point] – it protects from the cold of outer space
- Jet pack [point] – it contains gas to help astronauts move in space
- Moon boots [point] – heavy moon boots help them walk on the moon where there is less gravity
- Gloves [point] – keep fingers warm

Watch as I draw an astronaut wearing a uniform. You can help remind me of the parts as I label them.

During

DRAW a picture of an astronaut in uniform. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is an astronaut wearing a uniform. What do you think is one of the most important parts of the uniform?

Suggested labels: "helmet," "moon boots," "gloves"

PAUSE to focus on writing structure (labeling the parts of the astronaut's uniform).

Now that I drew the astronaut's uniform, I am ready to label it. Remember, labels are a few words that name or describe part of something. I am going to label the parts of the uniform that we just learned. First, I will write "helmet." I can draw a line from the word "helmet" to the helmet in the picture. (Continue to think aloud in this way as you label the uniform.)

FINISH labeling the drawing. INVITE children to reread the labels with you.

After

PLAY the game "What Can Help the Astronaut?" INVITE children to guess which part of the astronaut's gear helps them in space.

We just labeled different parts of an astronaut's uniform. Let's think about how these different parts protect and take care of astronauts while they are wearing it. I am going to give you a clue, and you tell me what part of the astronaut's uniform and gear helps them. There might be more than one answer! You can tell us which part and why you think it might help the astronaut. Ready?

I don't want to float away in space. What can help (e.g. space suit, jet pack, moon boots)? Tell us why you think it helps.

I have to fix the outside of the rocket ship. What can help (e.g. space suit, jet pack, gloves)? Tell us why you think it helps.

It's cold in outer space. I don't want my fingers to freeze. What can help (e.g. gloves, space suit)? Tell us why you think it helps.

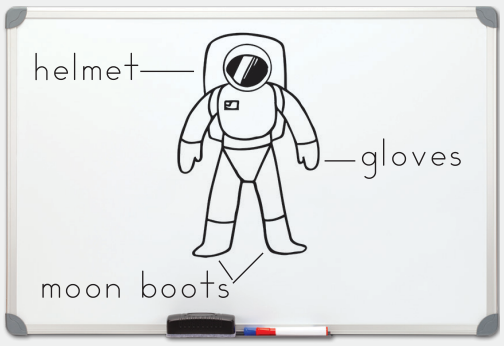
RESTATE that people wear uniforms for some jobs.

Today we talked about the astronaut's uniform. We learned that there are many different parts of the uniform. The entire space suit helps to protect the astronaut.

REREAD the message one more time.

[Transition] INVITE children to imagine putting on a helmet.

Imagine you are an astronaut getting ready to go in space. Let's put on our helmets. Lift the heavy helmet up onto your head. Look around! Can you see through the visor?



Make & Prepare

- Have the book *Mission to Space* ready. Mark the page that begins "We are 220 miles above Earth" with a sticky note.

Responding to Children

When playing the game "What Can Help the Astronaut?" there might be more than one answer to the clue. Give children time to explain their reasoning.

Keep It Going

- Gather children in a small group. Discuss why astronauts have to wear special suits (to protect them from the harsh conditions of outer space, to provide air to breathe, etc.). Ask children, "If you could put on a suit and visit any other habitat, where would you visit (you could even include visiting the sun!)? What would your suit have to be made of or contain?" Invite them to draw or write about their suit. For example, they might draw a suit with fins if they lived in water, fur or blankets if they lived in a polar region, a long tail or claws if they lived in a tree, wings if they fly, sunglasses and sunblock to visit the sun.
- Gather children in a small group. Draw a Venn diagram on large chart paper. As a group, compare and contrast the uniforms of an astronaut and firefighter (or another job you choose). What do they wear that is different? What do they wear that is the same? How do they help each person do their job? Do the parts of their uniforms help them in the same way or in a different way?

19 Intentional Read Aloud

Literacy: Comprehension

Children ask “I wonder” questions.

Make & Prepare

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

Additional Materials

- Anchor Chart: “Readers Can Say”
- Unit Chart: “What Happens in the Sky?”

Chickasaw Language

John Herrington speaks Chickasaw. Look through the language translation guide at the end of the book. In today’s lesson, we suggest exposing children to the Chickasaw word for “astronaut.” Feel free to share more Chickasaw words with children.

Interacting with Children

Use the words “I wonder” when you observe, work, or play with children. Share your genuine questions. Model your own curiosity to encourage children’s curiosity.

Before

REVIEW what an autobiography is. ASK children what it is like to be an astronaut.

Mission to Space is an autobiography. What is an autobiography? Yes, an autobiography is a book that a person writes about their life. John Herrington’s autobiography is about being an astronaut. What is it like to be an astronaut? Lean and tell a neighbor.

MODEL asking “I wonder” questions. INVITE children to share their thinking.

When I look at the cover of this book, I wonder how it feels to be wearing all that gear.

INVITE children to ask questions. PROMPT them to use the sign and sentence stem, “I wonder.”

When you look at the cover, what do you wonder?

If you would like to share, sign “I wonder” [demonstrate]. You can start by saying, “I wonder…”

As we reread *Mission to Space* today, notice what other questions you wonder about.

During

Pause after “Soon I was… with my fellow astronauts.” MODEL asking “I wonder” questions. INVITE children to share their thinking. PROMPT them to ask more questions. REMIND them to sign and say, “I wonder.”

John Herrington and his fellow astronauts are getting ready to fly to the space station. They are smiling and waving goodbye to the people on Earth. But I wonder if they felt nervous about flying to outer space? I wonder if any of the astronauts felt worried about going on the space mission? What do you think?

When you look at this photo, what do you wonder? If you would like to share your question, sign “I wonder.” You can also say, “I wonder…”

Pause after “Am I upside down or right side up?” MODEL asking “I wonder” questions. INVITE children to share their thinking. Then PROMPT them to turn and talk about their questions. ENCOURAGE them to use the sentence stem, “I wonder.”

Astronaut John is floating in outer space! He wonders if his body is turned upside down or right side up. I wonder how he is feeling in this moment? I wonder if he enjoys getting turned around? Do you think he is having fun?

Think about what else you wonder. Turn and talk with a partner about your questions. When it is your turn to talk, you can say, “I wonder…”

After

POINT OUT the translation guide at the end of the book. INTRODUCE the Chickasaw word for “astronaut.” Use the pronunciation guide to help children say “aba’ nowa’.”

John Herrington speaks a language called Chickasaw. Have you ever heard that language before? At the end of this autobiography, he teaches us how to say some words in Chickasaw. I wonder how to say “astronaut” in Chickasaw? Let me check… It’s “aba’ nowa’.” Can you say “astronaut” in Chickasaw? “Aba’ nowa’.”

INVITE children to ask lingering “I wonder” questions.

We learned so much about the life of John Herrington by reading this autobiography. But sometimes, even when we finish reading a book, we have more questions. What are you still wondering?

RETURN to the Unit Chart: “What Happens in the Sky?” INVITE children to add what they are learning and other questions they have.

Children add another activity card to the game "Get the Astronaut to the Space Station."

Build Interest

SHOW the "run out of gas" card.

We have been playing "Get the Astronaut to the Space Station." Let's add a new card to the game [show]. This is the "run out of gas" card. Astronauts need gas to run their spaceship. If the astronaut runs out of gas, they have to go back to the start!

Build Understanding

WORK TOGETHER to set up the grid. BRIEFLY REVIEW the cards as you add them.

Now that we have practiced our new activity, let's get the grid ready! Where should we put our cards (Earth, space station, asteroid, and heart)? Now, where should we put our newest card – the "run out of gas" card?

INVITE an astronaut to follow directions and move through the grid. INVITE the rest of the group to help turn over direction cards to create a path. DISCUSS what to do if children move off the grid, turn onto the obstacle, or land on the activity card or "run out of gas" card. ASK children to explain or read the directions on the path after they get to the finish.

Look at the path we created with the direction cards. Can you explain it or read it [for example, forward, forward, down, forward…]?

Did we encounter the asteroid? What did we do?

Did the astronaut land on the heart? What happened?

Did we land on the "run out of gas" card?

ENCOURAGE other children walk in the same path indicated by the cards.

Build Experience

COLLECT the materials from the grid. PLAY the game again. READ or explain the code at the end.

Now it's time to play again! Let's collect the game pieces and set it up in a different way. Where should we put the Earth [start card] now? Where should we put the space station [the finish card]? Where should we put the obstacle [the asteroid]? Where should we put the heart [activity card] now? Where should we put the "run out of gas" card?

SUMMARIZE adding an activity to the grid.

Wow! We are really learning a lot about codes. Our code today took the astronaut from Earth to the space station. We have several cards on the board that change up the game. Remember, a code is a path or set of directions. Let's discuss our experience with the coding games:

- What did you enjoy?
- What was tricky?
- What else would you like to try?

Make & Prepare

- Create a "run out of gas" card—write the words on a large index card or piece of paper. Draw a corresponding picture.

Additional Materials

- 4x4 floor grid or portable grid
- Direction cards
- "Earth" card; "Space station" card; "Asteroid" card; "Heart" card

Building Background Knowledge

Try just using the "run out of gas" card for this game.

Stretch Their Thinking

Have children create their own variations on the cards.

Listen/Look For

What do children share about coding game experiences?

20 Gathering Times

Literacy, Physical Development

Greeting Time

Children change the song to "Blasting Off Again" and pretend to launch.

Literacy: Literate Attitudes and Behaviors

ASK children where else they would like to travel in space.

We like exploring outer space with Astronaut John [show photo].

Imagine that we have just explored the moon, and it's now time to get back in our space shuttle. Where else should we go in outer space? Are you ready to travel back to Earth?

MODEL and GUIDE children to take turns pretending to launch. CHANGE the words of the song to "We'll be blasting off again."

Get ready to launch! Lift your arms and connect your hands. We will go around the circle like a wave. I'll launch by jumping up, then it's [name's] turn, and we will continue all the way around. Let's change the words of our song.

We'll be blasting off again, yes we will.
We'll be blasting off again, yes we will.
We'll be blasting off again,
We'll be blasting off again,
Yes we will.

Movement Time

Children sequence space movements.

Physical Development: Gross Motor Skills

REVIEW the space movements: "zero gravity" jumping jacks, "moon walk" lunges, and "moon rock" rolls.

We have landed back on Earth! Think about the ways we moved when pretending to be in space. What space movements have we done?

We practiced "zero gravity" jumping jacks. Who can remind us how to do them?

We did "moon walk" lunges." Who can show us how to do them?

And we tried "moon rock" rolls. Who can show us how to do them?

ASK children which movement we should do first, second, and third.

Let's put these three space movements together. Which one should we do first? Which one should we do second? Which one should we do third?

Okay, so first, we will... Second, we will… Third, we will…

MODEL and GUIDE children to sequence the movements.

Let's try to move all together at the same time, astronauts!

Talk Time

Children discuss what they learned in this unit.

Literacy: Listening and Speaking

DISCUSS what children have learned about the sky. SHOW artifacts for each week. ASK guiding questions such as the examples below.

It's fun to imagine we are in outer space. We have learned so much about what happens in the sky.

- What are some objects in the sky?
- How can the sky change?
- What information can we learn from observing the sky?
- What do you know about clouds?
- What do you know about rain?
- What do you know about the sun?
- What do you know about the moon?
- What is the same and different about day and night?
- What is an astronaut's job like?
- How is life different when traveling in outer space?

CLOSE with a cheer.

There is so much that happens in the sky! Let's celebrate our learning by choosing a cheer!

Material

- *Blueprint Songbook*
- Photo of Astronaut John

Concepts of Print

Reinforce the concept of print that sentences are made of words. For example, you might say, "Please come to the rug. How many words is that?" Say the words again as you count on your fingers. "Five words!"

Ordinal Numbers

In this lesson, children decide what movement to do first, second, and third. These are examples of ordinal numbers which indicate position or order in relation to other numbers. Cardinal numbers (one, two, three, etc.) represent quantity.

Keep It Going

- Invite children to create patterns using the space movements. For example, an AB pattern could be: "moon rock" roll, "moon walk" lunge, "moon rock" roll, "moon walk" lunge.

Materials

- Unit Chart: "What Happens in the Sky?"
- Unit Project: Weather Data
- Sky cards
- Rain sticks
- Sun and moon props
- Photo of Astronaut John
- Any additional charts and artifacts that reflect children's learning in this unit

Assessment

Use the resources on the *Blueprint* website to gather and analyze information about children's progress.

Reflection Time | What happens in the sky?

Children discuss how Astronaut John follows the "Power of 3."

Before

SUMMARIZE how astronauts work together on space missions.

We have been exploring what it is like to be an astronaut and go on a space mission. An astronaut works hard to prepare and train. But astronauts do not work alone! They work with other astronauts or their crew to get their mission accomplished.

CONNECT to the classroom community and the Power of 3.

In our classroom, we all work hard to learn and grow each day! But we do not work alone! We have a classroom community that is like our crew. Our classroom crew has something special to help us remember the responsibilities we have for ourselves and for each other. What is it?

Yes! The "Power of 3!" Let's read over our Power 3 [point and read].

ASK how Astronaut John follows the Power of 3. EXPLAIN that you will discuss this today.

Today we are going to think about Astronaut John and how he shows that he is responsible. Watch as I write a question wondering if he follows the Power of 3. Then we will talk about it!

During

DRAW a picture of an astronaut. DESCRIBE what you are doing and thinking. INVITE children to contribute.

Here is Astronaut John. What should I add to his uniform?

Suggested message: "Does Astronaut John follow the Power of 3?"

PAUSE to focus on concepts of print (forming the uppercase *letter J*).

The next word I want to write is "John." John is a name. /j/, John. "John" begins with the *letter j*. Since it is a name, I'll write an uppercase *letter J*. I start at the top, drop down, and swing up. Now you try writing it with your finger in the air.

INVITE children to reread the message with you.

After

ENGAGE children in a discussion about ways Astronaut John exhibits the Power of 3. GUIDE children through each component of the Power of 3. BROWSE through or reread parts of the book *Mission to Space* to support the discussion.

Let's think about how Astronaut John follows the Power of 3! How does he:

- Take care of himself
- Take care of others
- Take care of the environment

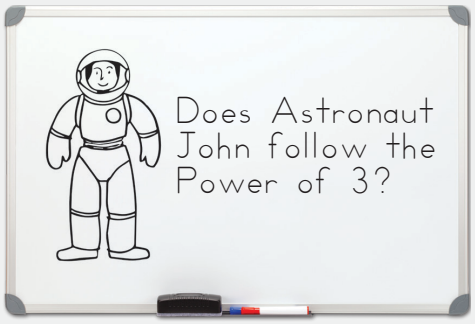
SUMMARIZE the discussion of Astronaut John.

Wow! Astronaut John practices the Power of 3, just like we do! We noticed that he…

REREAD the message one more time.

[Transition] INVITE children to choose their favorite space movement of the week.

Let's take care of ourselves by exercising like Astronaut John! Think about your favorite space movement from Movement Time. Do you want to do "zero gravity" jumping jacks, "moon walk" lunges," or "moon rock" rolls?



Materials

- The book *Mission to Space*

Connection to Other Units

In this lesson, we ask children to consider how Astronaut John displays the responsibilities on the Anchor Chart: "Power of 3." In Unit 10, we will ask children to reflect on how they put the "Power of 3" responsibilities into action.

Keep in Mind

When you develop a positive atmosphere and community culture in your classroom, children feel supported and that they belong. In addition, the classroom has a seamless feel to it. Of course, there are bumps in the road from time to time, but a willingness to address issues as they arise, and to see them as learning opportunities, is a part of positive classroom culture.

Keep It Going

- While reading with children at the library center, invite them to point out how other people and characters put the "Power of 3" into action.
- Gather children in a small group. Together create a T-chart. On one side of the chart write, Astronaut John, and on the other side write, their name. How are they similar? How are they different? Invite children to share ideas while you write them down on the T-chart.

20 Intentional Read Aloud

Literacy: Literate Attitudes and Behaviors

Children vote for their favorite book from the unit.

Make & Prepare

- Bring the sky cards from Week 1: Greeting Time.
- Review the ASL sign for "I like" on the *Blueprint* website.

Additional Materials

- Anchor Chart: "Readers Can Say"
- Anchor Chart: "Cheers"
- All Unit 9 read-aloud books:
  - *Up, Up, Up!*
  - *Picture the Sky*
  - *Clouds*
  - *Rain*
  - *What the Sun Sees, What the Moon Sees*
  - *Max and the Tag-Along Moon*
  - *One World, One Day*
  - *Hey-Ho, to Mars We'll Go!*
  - *Mission to Space*

Extra Engagement

Feel free to repeat or include an extra engagement piece, depending on which book children choose. For example, if they choose *Hey-Ho, to Mars We'll Go!* invite them to act out the space trip and/or sing along.

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.

Responding to Children

Are children able to participate in the organization and display 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

Briefly REVISIT each read-aloud book from Unit 9. PLACE each one in a row.

We have been exploring what happens in the sky! Let's look at all of the sky books we have read together.

First, we went on a make-believe hot air balloon ride through the sky in *Up, Up, Up!* We observed many ways the sky could change in *Picture the Sky*.

Next, we learned more about different ways that clouds could be in *Clouds*. And we joined the animals in tracking a storm using their senses in *Rain*.

Then we compared day and night in this flip book: *What the Sun Sees, What the Moon Sees*. In *Tag-Along Moon* we realized the moon reminds Max of his grandpa. *One World, One Day* reminded us that no matter where on Earth we are, we can observe the same sun and moon in the sky.

Last, we pretended to travel to outer space in *Hey-Ho, to Mars We'll Go!* We learned all about the life of Astronaut John Herrington in his autobiography *Mission to Space*.

GIVE TIME for children to reflect on which book is their favorite. ASK how we can find out which is the class' favorite book. INVITE small groups to place a sky card 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 is? Yes, we can vote! In a moment, each of you will have a turn to place one of our sky cards in front of your favorite book.

ASK children how we can find out which book the most readers chose. GUIDE them in counting the sky cards 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 sky cards for each book. Then we will reread that book today! Please count along…

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 had fun reading about what happens in the sky. Let's celebrate our learning by choosing a cheer!

Children play the board game version of "Get the Astronaut to the Space Station."

Build Interest

CONNECT to playing coding games. SHOW the 4x4 grid and direction cards. TELL children they are going to play a smaller version of the game "Get the Astronaut to the Space Station."

Today we are going to play "Get the Astronaut to the Space Station" again. But we have a new, smaller board [point], so we can play with partners at our table.

Build Understanding

PLAY one game together. INVITE children to help set up the game.

We are going to help the astronaut [show card] go from Earth [show card] to the space station [show card].

Where should we put these cards?

Let's see if we can get the astronaut to the space station. We need to make a path or code [trace with finger]. We will turn over direction cards to make a path and then leave the cards in their boxes to show our path [point and trace with finger to show a path]. Let's try it!

DECIDE together if the group wants to add any other cards (asteroid, heart, or "run out of gas" cards). Then CREATE a path or code with the direction cards on the grid with the children.

Let's play!

What should we do first?

What does our first card tell us? Where do we place it?

GUIDE children as they discuss how to turn over cards and place them in the grid to create a path for the astronaut. Then REVIEW the path. INVITE children to read the code.

Build Experience

DISTRIBUTE grids and game baggies to each partnership. INVITE children to set up their game boards. INVITE children who speak the same home language to play with each other in their home language to solidify and extend their learning.

Let's work with partners today on this smaller version of our astronaut grid game. You will share a grid. Decide where to put the Earth and space station cards. Will you add an obstacle? Will you add a heart? Will you add a "run out of gas" card?

Take turns turning over a direction! Get your astronaut to the space station!

DISCUSS the game with the partnerships. INVITE them to read the code they made on their board.

Look at the path or code you created to get the astronaut to the space station. Can you read the code?

SUMMARIZE creating a path or code on smaller boards with a partner.

Today you worked with a partner to create a code on a smaller board. You helped the astronaut get to the space station! Way to go creating this set of directions!

Make & Prepare

- Download, print, and copy the 4x4 "Get the Astronaut to the Space Station" grid (one per partnership).
- Create a "Get the Astronaut to the Space Station" game baggie for each partnership.
- Download and print:
  - One Earth/start card
  - One space station card/finish card
  - One astronaut card
  - One asteroid/obstacle card
  - One heart/activity card
  - One "run out of gas" card
  - One set of small direction cards

Additional Materials

- Crayons

Building Background Knowledge

Invite children to share how they solved problems as they play the grid games. Ask if anyone has almost gone off the board. What did they do to solve it?

Stretch Their Thinking

Invite children to think of other cards they might add to the game board. What would those cards mean for the player?

Listen/Look For

- What do children say or do as they work with a smaller grid board?
- Do children look ahead or count to see how many more spaces until the end?

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

Keep It Going

- Add these materials to the science center, so children can continue playing.

APPENDIX

Digital Online Resources

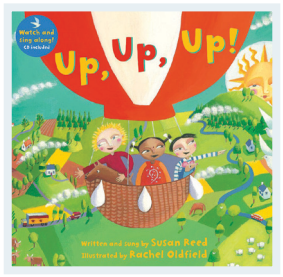
https://cliblueprint.org/resources-tx

At the web address above, you will find the following resources and downloads.

- ASL Signs (images & videos)
- Board Games
- Family Resources
- Featured Class Books
- Letter and Numeral Formation Guide
- Mindful Moments
- Science Journals
- Songs, Poems, Chants (audio & print)
- Teaching Point Checklist
- Unit 9 Images
- Weekly Materials List
- Yoga Poses (images & video)

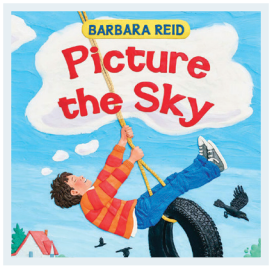
Continued Conversations

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.



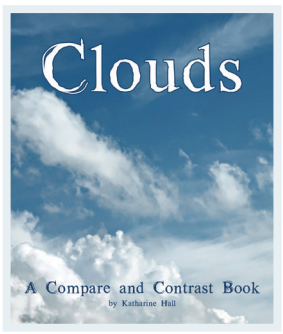
Up, Up, Up!

- Where would you go in a hot air balloon?
- The children have a dog and mouse in their hot air balloon. If you were in a balloon what animals would you take with you?
- What other ways would you want to travel in the sky?



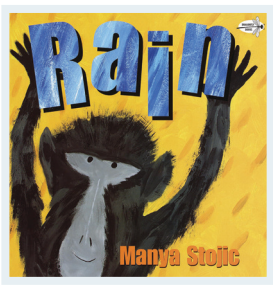
Picture the Sky

- Do you think the sky looks different to different animals? How do you think birds picture the sky? How about dogs?
- The illustrator made the pictures with plasticine, a kind of clay, like Play-Doh. If you were making pictures of the sky what material would you use? What colors and shapes would you have in your picture?
- If the author wrote another book, what do you think it would be about?



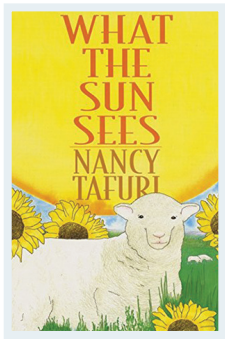
Clouds

- There are different kinds of clouds: big and fluffy, small and wispy, colorful, and storm clouds. What kind of cloud would you like to be? Why?
- Let's look out the window at the sky. Do any of the clouds out there look like the clouds in the book? How would you describe the clouds outside?
- If you were high in the sky like a cloud, what would you see?



Rain

- At the end of the book it is hot and everything is drying out again. What do you think the animals will do?
- What do you do when you are hot?
- These animals live on the African savanna. Which of these animals is your favorite? Why? What other animals do you know live on the African savanna?

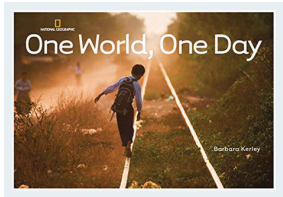


What the Sun Sees, What the Moon Sees

- If you were the sun or the moon shining in the sky what would you want to see?
- One side of this book is about the sun and the other side is about the moon. If you made a book about opposites, what would your book be about?
- What do you think the sun and the moon hear?

Max and the Tag-Along Moon

- Max likes to look at the moon. Do you think the moon likes to look at Max?
- What would the moon say to Max if it could talk to him?
- What else do you think Max likes to do with his grandpa? What do you do with your grandparents or other relatives?



One World, One Day

- There are photos of children around the world doing things during the day. If there was a photo of you in this book what would you be doing?
- What is your favorite photo of children doing things with others? Why? What do you like to do with others?
- What is your favorite photo of children doing something alone? Why? What do you like to do alone?

Hey-Ho, to Mars We'll Go!

- What might the astronauts see when they explore Mars?
- Would you want to explore Mars? Why or why not?
- When the astronauts travel back to Earth, what do you think they do in their rocket? What do they see out the window?

Mission to Space

- What do you think Astronaut John saw on his spacewalk? What do you think it felt like?
- If you went on a space mission, what would be the easiest part for you? Why? What would be the hardest part? Why?
- What do you think is the best part about being an astronaut?

Coming Up in Unit 10:

"Celebrating Our Classroom Community"

Community has been a theme throughout the curriculum. As children prepare to say goodbye to their classroom community, they celebrate their progress and reflect on their year. They build excitement for their next year at school, and they review how the Power of 3 helps us take care of ourselves, each other, and our environment from this classroom to the next!

In preparation for Unit 10:

- Gather charts, photographs, class books and other artifacts that will trigger children's memories of the activities in which they have participated.
- Begin collecting items that you can use to launch the next dramatic play center, "Party Time!" such as paper for invitations, pencils, markers, envelopes, gift boxes, gift bags, wrapping paper, scissors, tape, birthday cards, stationary, cake or cupcake pans, streamers, and party hats.

Teaching Point Checklist

Primary Standard	Teaching Point	Date	Observation Notes
Approaches to Learning: Persistence and Attentiveness	Children add on to a list of things they would bring on a trip to the moon.		
Approaches to Learning: Initiative and Curiosity	Children discuss what they know about what happens in the sky.		
	Children solve a problem: how to fix a hole in a cup.		
Social Emotional: Self-Awareness and Self-Concept	Children practice “Raindrops.”		
	Children practice “Outer Space.”		
Social Emotional: Self-Regulation and Responsible Behavior	Children role-play with a puppet how to solve a problem.		
	Children brainstorm solutions to a problem.		
Social Emotional: Social Awareness and Relationships	Children review what it means to think about how others feel.		
	Children think about how others feel using puppets.		
	Children role-play what to do when you hurt someone’s feelings.		
	Children use empathy to solve a problem with puppets.		
	Children discuss how Astronaut John follows the “Power of 3.”		
Literacy: Literate Attitudes and Behaviors	Children use props to say and create their own poems about different objects in the sky.		
	Children sing about soaring in a spaceship with variations (changing the words, lying on their bellies, etc.).		
	Children vote for their favorite book from the unit.		
Literacy: Listening and Speaking	Children use clues to solve a riddle about the sky.		
	Children listen to the class book.		
	Children discuss what they learned in this unit.		
Literacy: Phonological Awareness	Children count syllables in the names of sky objects.		
	Children listen for a word that rhymes with the object on their sky card.		
	Children identify letters in the word on their sky card.		
	Children play a rhyming game about packing a plane.		
	Children change the beginning sound in words to make new words.		
	Children move rain sticks to signal words that rhyme.		
	Children move rain sticks to signal words that begin with /r/.		

Photocopy as needed.

Also available for download at cliblueprint.org/resources-tx.

Teaching Point Checklist

Primary Standard	Teaching Point	Date	Observation Notes
Literacy: Phonological Awareness	Children use rain sticks to blend words.		
	Children combine the onset and rime in words.		
	Children compare and match uppercase and lowercase letters.		
Literacy: Comprehension	Children think about how people feel.		
	Children share what they wonder about clouds.		
	Children discuss how the moon reminds Max of his grandpa.		
	Children make connections.		
	Children ask “I wonder” questions.		
Literacy: Fluency	Children act out and sing along with the books.		
	Children join in reading repeating words and phrases.		
Literacy: Vocabulary	Children learn the word “masterpiece.”		
	Children learn words to describe different clouds.		
	Children learn the word “launch.”		
Literacy: Writing	Children begin work on a class book.		
Math: Numbers and Number Sense	Children tap their rain sticks to match a numeral.		
Math: Operations and Algebraic Thinking	Children play the game “Count the Clouds.”		
	Children play the game “Roll, Count, Combine” with variations.		
	Children play the game “Count the Clouds and Stars.”		
Math: Geometry and Spatial Relations	Children play the game “Is this an orb?”		
Science: Scientific Inquiry and Practices	Children use the power of observation to search for details in pictures.		
	Children listen to sounds in the sky and describe what they hear.		
	Children set up an investigation to see if water changes.		
	Children identify the senses the animals use to observe the rain.		
	Children wonder what it is like for animals that travel to space.		
Science: Physical Sciences	Children learn about gravity.		
	Children investigate how heat from the sun changes ice.		

Photocopy as needed.

Also available for download at cliblueprint.org/resources-tx.

Primary Standard	Teaching Point	Date	Observation Notes
Science: Physical Sciences	Children create craters in a pan of flour.		
	Children explore how shadows are made.		
	Children create shadow puppets.		
	Children notice how people and things float in space.		
Science: Life Sciences	Children learn the word “nocturnal.”		
Science: Earth and Space Sciences	Children match picture cards of objects in the sky.		
	Children use sky cards to answer clues.		
	Children launch the unit project.		
	Children identify what they see in the sky.		
	Children describe how the sky changes.		
	Children discuss what information we get from the sky.		
	Children discuss what they know and wonder about clouds and rain.		
	Children discuss water and name places they see it.		
	Children imagine what clouds look like.		
	Children select appropriate clothing for a rainy day.		
	Children discuss how rain helps plants and animals.		
	Children explore the shape of clouds using shaving cream.		
	Children explore how water droplets interact with each other.		
	Children fill a sponge with water until it releases water.		
	Children investigate materials to determine which are absorbent.		
	Children discuss what they know and wonder about the sun and moon.		
	Children discuss the results of the unit project.		
	Children tell what the sun and the moon would see on Earth.		
	Children discuss how day and night are different.		
Science: Engineering and Technology	Children design their own astronaut patches.		
	Children play the game “Get the Astronaut to the Space Station” with variations (obstacles, activity cards, etc.)		

Photocopy as needed.
Also available for download at cliblueprint.org/resources-tx.

Primary Standard	Teaching Point	Date	Observation Notes
Physical Development: Fine Motor Skills	Children blow a cotton balls (off their hands, into a target, using different kinds of breath, etc.).		
Physical Development: Gross Motor Skills	Children practice “zero gravity” jumping jacks.		
	Children practice “moon walk” lunges.		
	Children practice “moon rock” rolls.		
	Children sequence space movements.		
Social Studies: Being a Community Member	Children discuss what they know and wonder about astronauts and space travel.		
	Children identify parts of an astronaut’s uniform.		
	Children learn about the life of an astronaut.		
Creative Arts: Creative Movement and Dance	Children practice yoga poses (rainbow, star, plane, lightning, moon).		
	Children do sun salutes with variations (moon salute, star salute, whispering “thank you,” etc.).		
	Children act out blasting off in a spaceship.		
Creative Arts: Dramatic and Performance Art	Children launch the weather station dramatic play center.		
Creative Arts: Music	Children create a rain stick.		
	Children move rain sticks in different ways.		
	Children create sounds of a rainstorm with their hands.		

Photocopy as needed.

Also available for download at cliblueprint.org/resources-tx.

What's Happening Now

Dear Families,

Children continue to explore their world by looking up to the sky! They learn about what can be found in the sky, such as the sun, moon and clouds, and how daytime and nighttime are different. They learn about astronauts and outer space, encouraging them to use their imagination and curiosity to explore concepts like gravity and space travel.

During this unit, children also:

- Practice identifying uppercase and lowercase letters
- Begin working on combining and adding objects
- Create shadow puppets
- Learn about astronaut's gear and how they train for their missions

Keep It Going

Share Learning

Children are learning that things fall down toward the Earth. Discuss how all things fall down toward the Earth, but different things fall differently, like a feather versus a toy car. The feather sort of floats down. Ask your children: Does the car float? Invite them to test different objects and observe how they fall. What is making the feather and other objects fall differently? Explorations such as these may lead to other questions that children can test out. Send any photos or information you learn to school to share!

Share Your Expertise

We are looking for family members who might share what they know about weather forecasts, the sky, astronomy, and airplanes.

Share Some Supplies

- Clean, plastic water or juice bottles
- For the new weather station dramatic play center, we are looking for maps, old or toy video cameras, keyboards, old computer monitors, old or toy microphones, newscaster/weather forecaster clothing (winter coats, raincoats, hats, scarves, blazers, ties, dresses, etc.), and weather tools (thermometers, barometers, pinwheels, fans, etc.).

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

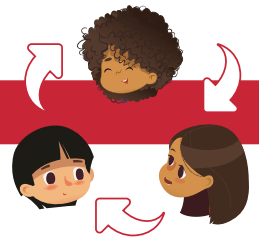
Dear Families,

Here are some things that you can do at home to support what your child is learning in school.

Keep Them Healthy & Active

Learning how to calm the mind is one way we teach children to take care of themselves Here's one exercise you can do with your child:

Sit comfortably and close your eyes. Take a few slow, deep breaths in and out of your nose. Notice the thoughts in your mind. Are you thinking about a lot of things? Imagine that your thoughts are pieces of dirt on your skin. Make believe it is starting to rain. Welcome the warm, gentle raindrops on your skin. Let them wash off the dirt. All your thoughts just trickle away. Now the bright sun comes out and dries you off. Slowly open your eyes… How do you feel?



Develop Their Emotional Well-Being

When your child is upset, they may not be able to articulate their feelings with words. Instead they may show their feelings in less verbal ways, such as crying. In these moments, model empathy by noticing your child's behavior ("I see you are crying"). Help them to identify the emotion they're experiencing ("Sometimes when a person cries, they are upset. Are you feeling upset?"). Assist them in uncovering the reason they are upset ("Let's try to figure out what happened to make you feel upset").

Modeling empathy over time can help your child become more attuned to their own feelings and develop empathy for others.

Help Them Communicate

Growing your child's descriptive vocabulary is an ongoing process. One way to do so is to look at an object (such as an umbrella or a puddle) and use your senses to describe it. I see…I hear…I feel…I smell…Provide words for children to use so they can be more specific with their descriptions.

Explore Their World

In school, your child is encouraged to ask questions that begin with the phrase "I wonder…" When they ask you a question that you may not know the answer to, explore the answer together. Go to the library, and look through books or other digital resources. Learn together!

This is a unit letter you can send home to families.

Available for download at cliblueprint.org/resources-tx or photocopy as needed.

Songs, Poems and Chants

"What Will the Sky Be Today?"

[Sing to the tune of "This Old Man."]

Each sunset, each sunrise,

We can look up at the skies.

Is it a blue or a gray or a sunny day?

What will the sky be today?

"The Umbrella"

When it's raining down, raining down,

Water flowing all around,

My umbrella will keep me dry.

Come under my umbrella, too.

There's always room for friends like you.

"Come Outside"

Come outside! Let's have some fun!

There's enough sunshine for everyone.

The sun is high up in the sky.

The light is bright, and all is right.

Come outside! Let's have some fun!

There's enough sunshine for everyone.

"Soaring in the Spaceship"

[Sing to the tune of "Coming 'Round the Mountain."]

We'll be soaring in the spaceship, yes we will.

We'll be soaring in the spaceship, yes we will.

We'll be soaring in the spaceship,

We'll be soaring in the spaceship,

We'll be soaring in the spaceship,

Yes we will.

This is a unit letter you can send home to families.

Available for download at cliblueprint.org/resources-tx or photocopy as needed.

Yoga Poses

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.

Star Pose

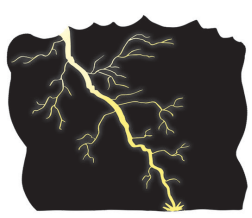
1. Let's make the five points of a star.
2. Stand and space out your feet to make two points.
3. Make your head the third point by stretching through your neck.
4. Stretch both arms up and out.
5. Make your hands the fourth and fifth points of the star.
6. Wiggle your fingers like a twinkling star!

Plane Pose

1. Start standing.
2. Stretch one leg straight back as you lean forward.
3. Reach both arms out to the sides like plane wings.
4. Try your best to balance. Imagine you are flying in the sky.
5. Slowly come back up to stand.
6. Try the other leg!

Lightening Pose

1. Stand with one foot forward and the other foot back.
2. Bend your front knee, and bring your back knee to the ground.
3. Reach one arm alongside your body, and the other arm past your ear.
4. Do you feel like a lightning bolt in the sky?
5. Come back up to stand, and switch legs!

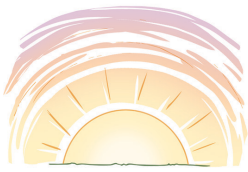


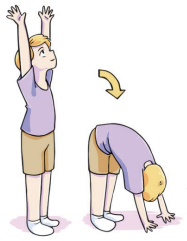
Moon Pose

1. Stand with your feet close together.
2. Reach both arms up and connect your hands.
3. Lean your upper body over to one side.
4. Take three deep breaths. Do you feel like a crescent moon?
5. Come back up to stand, and try leaning the other way!

Sun Salute

1. Start standing. Feel your feet on the ground.
2. Reach your arms up to the sky and look up. Say, "Hello, sun!"
3. Dive down and touch the ground.
4. Stand all the way back up, reach up, and look up. Say, "Thank you, sun!"
5. Rest your arms by your sides.
6. Take a deep breath in, and a slow breath out.





This is a unit letter you can send home to families.

Available for download at cliblueprint.org/resources-tx or photocopy as needed.

Children's **Literacy** Initiative

BLUEPRINT

Michele Coulombe Lead Curriculum Developer
Amy Fatall - Senior Contributor
Erin Zuccaro - Senior Contributor
Brenda Leger - Publisher

Michael Jones Creative Director
Justin Hudson - Design & Layout
Priscilla Williams Illustration & Design

Contributors
Katherine Mach
Kate Lafferty
Glennis Lizardo
Kelly Phillips

Guest Contributors
Alissa Lange
Jacky Howell
Academy of Natural Sciences of Drexel University
Emily McCarthy
Julie Marzano

Pilot Programs
Augusta County VA Public Schools
Elizabeth NJ Public Schools
Newark NJ Public Schools
Belmont Academy of Philadelphia

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.

ISBN 978-1-7345672-1-2