



Unit 4

Astronomy



PROJECT
READY

MOUNT ST. JOSEPH UNIVERSITY®

Joyful Discoveries Preschool Curriculum

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Created by: Dr. Amy Murdoch, Ms. Rosie Warburg, and Dr. Maria Aielli

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Unit 4 Astronomy



Project Ready's Joyful Discoveries Preschool Curriculum

Unit 4 - Astronomy

Unit Overview:

This unit teaches children about outer space! It is the first science unit in the curriculum and is typically done across one month. It has three sub themes that explore the universe and the planets in our solar system, our sun and moon, and Astronauts.

Knowledge Building Targets

1. The Earth is our planet
2. The Universe
3. Maps and globes
4. Scientists and what they do: astronomer, astronaut and engineer
5. Science tools: telescope
6. Moon
7. Moon landing
8. Planets in our solar system
9. Mars
10. Mars Rover - Curiosity
11. NASA
12. Stars and constellations
13. Engaging in play with peers

Oral Language Skill Targets

1. Answering questions
2. Stating an Opinion
3. Academic Vocabulary
4. Story Vocabulary: author, illustrator, title, character (who), setting (where)
5. Length of sentences
6. Extended decontextualized accounts, explanations, and narratives
7. Retelling/summarizing
8. Fluency

Early Literacy Skills

1. Print book skills: title, author, directionality
2. Listening comprehension
 - a. Answering Key Questions
 - i. Memory for events
 - ii. Retelling
 - iii. Following directions
3. Sequencing of events
4. Fiction vs. Nonfiction
5. Writing Skills
 - a. Letter formation
 - b. Shared writing
6. Early writing through crafts

Math Skills

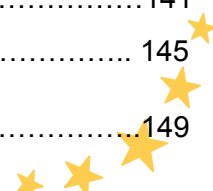
1. Small number recognition without counting
2. Counting
3. Number recognition
4. More than, less than, same
5. Number after knowledge
6. Number comparisons
7. Number after equals one more
8. Addition
9. Subtraction
10. Patterns
11. Story Problems





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Unit 4: Astronomy

Overview

Part 1: The Universe is BIG & Planets

★ BOOK 1	★ BOOK 1	BOOK 2	★ BOOK 3
<p><i>A Pig is Big</i> by Douglas Florian *Out of Print</p>  <p>Rhyme Time</p> <p>Math</p>	<p><i>I Am Big But I'm Not the Biggest</i> by The Project Ready Team!</p>  <p>Text by The Project Ready Team Illustrated by Maddie Taylor</p> <p>Math</p> <p>*Alternative to <i>Pig is Big</i></p>	<p><i>Here We Are: Notes for Living on Planet Earth</i> by Oliver Jeffers</p> 	<p><i>Me and My Place in Space</i> by Joan Sweeney</p>  <p>Shared Writing</p> <p>CREATING ART</p> <p>*Dramatic Play center introduced</p>

BOOK 4	BOOK 5	★ BOOK 6	BOOK 7	★ BOOK 8
<p><i>Planets</i> by Becky Baines</p>  <p>Non-Fiction</p>	<p><i>On the Launch Pad</i> by Michael Dahl</p>  <p>Math</p>	<p><i>Sleepy Solar System</i> by John Hutton</p>  <p>Rhyme Time</p> <p>CREATING ART</p>	<p><i>The Sun in Kind of a Big Deal</i> by Nick Seluk</p>  <p>Challenge</p>	<p><i>Birthday on Mars</i> by Sara Schonfeld</p>  <p>Shared Writing</p> <p>CREATING ART</p>



Unit 4: Astronomy

Overview

Part 2 - Moon & Stars

★ BOOK 9	BOOK 10	BOOK 11	BOOK 12
<p><i>Kitten's First Full Moon</i> by Kevin Henkes</p>  	<p><i>Ten Twinkly Stars</i> by Tiger Tales & Russell Julian</p>  	<p><i>City Moon</i> by Rachel Cole & Blanca Gomez</p> 	<p><i>Moon: A Peek-Through Picture Book</i> by Britta Teckentrup</p>   
BOOK 13	★ BOOK 14	BOOK 15	BOOK 16
<p><i>Moon's First Friends</i> by Susanna Leonard Hill</p>  	<p><i>Henry's Stars</i> by David Elliot</p>  	<p><i>Our Stars</i> by Anne Rockwell</p>  	<p><i>How to Catch a Star</i> by Oliver Jeffers</p> 

★ = Second Read



Unit 4: Astronomy

Overview

Part 3 - Astronauts

BOOK 17	★ BOOK 18	BOOK 19	BOOK 20	BOOK 21
<i>I Want to be an Astronaut</i> by Byron Barton 	<i>Small World</i> by Ishta Mercurio 	<i>Mae Among the Stars</i> by Roda Ahmed 	<i>Rocket Says Look Up!</i> by Nathan Bryon 	<i>Astronaut Training</i> by Aneta Cruz 
				

Wordless Books That Connect This Unit - SAMMY

Delivery by Aaron Meshon

Field Trip to the Moon by John Hare

La La La by Kate DiCamillo

★ = Second Read



Materials

Packaged Materials in North America Unit

I Am Big But I'm Not the Biggest by the Project Ready! Team

Planet posters for Dramatic Play Center

Henry's Stars Constellation Cards

Craft Materials

Construction Paper - orange and red

Paint: orange or red, green, blue, gray, yellow

Marbles

Pan or tray with sides (Book 8- *Birthday on Mars*)

Gluestick

Paintbrush

Q-Tips

Crayons or markers for coloring

Dramatic Play Center Materials - Observatory

[Astronaut costume](#)

[Solar system felt board](#)

[Telescope](#)

[Rocket and rover playset](#)

[Phases of the moon blocks](#)

[Planet cut outs](#)

(First used with Book 3 before placing in center)

Planet posters (see Astronomy Materials binder)

Additional books about space

Materials to Prepare - Found on www.readingscience.org

If using *A Pig is Big* - relative size sorting cards and optional rhyming cards

Solar System Booklet - one for each student to make and take home

Rover - one for each student
(Blackline master found in Appendix)

Small World activity template - one for each student
(Blackline master found in Appendix)

Kitten's First Full Moon craft template and star cutouts

*Print moon on cardstock - one for each student and cut stars from yellow paper
(Blackline master found in Appendix)

Astronomy Centers

★ Observatory Dramatic Play Center

Purpose: Let children explore looking through a telescope and examining different space objects. Play dress up as an astronaut and look through books about space. This provides children an opportunity to use their newly learned knowledge and vocabulary in their play.

Materials: Planets Poster & Astronomy Books; Dress Up Costume of an Astronaut, Child's telescope; pictures of planets, the moon, constellations placed around the room for children to view; observation book to record what they see & materials to color and write in the books.

We suggest Adding these materials after Book 3 - *Me and My Place in Space* by Joan Sweeney. Children will have exposure to the concepts around space and astronomy.

How it Works:

Add books & posters to science center to get children interested in astronomy. Let them know that we are setting up an observatory in our science center. *An observatory is where you can go to look at the stars and planets through telescopes and learn more about them. Astronomers are scientists who work at observatories and study and teach about the stars.*

Talk about (maybe show pictures) of the observatory in your city. Place pictures of planets, stars, constellations, and the moon around the room for children to view through the telescope. When these new items are added to the Nature Center be sure to introduce the items and explain how to use them.

Explain that a telescope is a tool that Astronomers (Scientists who study space—planets, stars, etc.) use. They can pretend to be astronomers by aiming the telescope at different objects in the “sky” and observing them through the telescope and then writing down their observations in our Observation book (small notebook).

Astronomy Observatory Center



Astronaut Costume



Go on a pretend space mission. Practice vocabulary and oral language skills while playing with pet



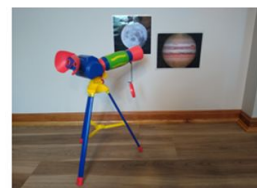
Felt Board with Astronomy Pieces



Create a space scene. Use the felt pieces to tell a story. Name the planets, moon, and sun.



Telescope



Examine the planet photos close up through the telescope.



Space Set with Rocket and Rover



Take two astronauts on a mission. Practice vocabulary and oral language skills.



Phases of the Moon Blocks



Basket of Space Books to Explore.



Library Center

★ Additional Books about Space to Include in Library Center:

Every Planet Has a Place by National Geographic Kids

So That's How the Moon Changes Shape! by Allan Fowler

The Sun by Melanie Chrismer

Venus by Seedlings (Has a book for each planet)

There's No Place like Space! by Tish Rabe

Astronomy for kids: Planets, Stars & Constellations by Intergalactic Kids Book Edition

I Am Moon by Rebecca and James McDonald

Solar System by Jill McDonalad

Our Solar System by Peter and Connie Roop

ABC Universe by American Museum of Natural History

How Many Stars in the Sky? by Lenny Holt

I am Neil Armstrong by Brad Meltzer

Mae Jemison by Mary Nhin

My First Book of Planets by Bruce Betts

Eight Little Planets by Chris Ferrie



Full List of Unit Vocabulary - Astronomy

Book	Word	Definition	Gesture
<i>A Pig is Big</i>	measure	use a tool to see how big something is	palms touching and move out as if showing width
<i>A Pig is Big</i>	earth	the planet where we live	hands form a small circle in front of the body
<i>A Pig is Big</i>	universe	everything that exists in space, including us, planets and stars	Stretch your arms high above your head then slowly drop them to your sides
<i>I am Big But Not the Biggest</i>	earth	the planet where we live	hands form a small circle in front of the body
<i>I am Big But Not the Biggest</i>	enormous	very big	Outstretched arms with palms facing toward each other and spread arms wide apart
<i>I am Big But Not the Biggest</i>	universe	everything that exists in space, including us, planets and stars	Stretch your arms high above your head then slowly drop them to your sides
<i>Here We Are: Notes for Living on Planet Earth</i>	earth	the planet where we live	hands form a small circle in front of the body
<i>Here We Are: Notes for Living on Planet Earth</i>	complicated	difficult to understand, with lots of pieces	shrug your shoulders and hold hands up in front of your chest with palms up to the ceiling
<i>Here We Are: Notes for Living on Planet Earth</i>	patient	to wait calmly	put your hands together and gently put them in your lap
<i>Me and My Place in Space</i>	planet	a huge natural object that travels around a star, our planet is Earth	hands form a small circle in front of the body
<i>Me and My Place in Space</i>	solar system	everything that travels around the sun, including eight planets	Hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
<i>Me and My Place in Space</i>	universe	everything that exists in space, including us, planets and stars	Stretch your arms high above your head then slowly drop them to your sides



Full List of Unit Vocabulary - Astronomy

Book	Word	Definition	Gesture
<i>Planets</i>	planet	a huge natural object that travels around a star, our planet is Earth	hands form a small circle in front of the body
<i>Planets</i>	solar system	everything that travels around the sun, including eight planets	Hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
<i>Planets</i>	universe	everything that exists in space, including us, planets and stars	Stretch your arms high above your head then slowly drop them to your sides
<i>Planets</i>	galaxy	a group of solar systems that stay together, we live in the milky way galaxy	hold your hands in front of you with palms facing each other, move hands in circular motions wiggling your fingers
<i>On the Launch Pad</i>	tasks	jobs, work that must be done	hold one hand flat, palm facing toward you like it is a notepad, use the other hand to check off items on a list
<i>On the Launch Pad</i>	engineer	a scientist who creates and builds things	hold your pointer finger up next to your head
<i>On the Launch Pad</i>	fuel	what we put in the rocket (and our car) to give it power to go!	Make a fist with one hand and pretend you are filling up your car with gas.
<i>Sleepy Solar System</i>	Earth	the planet where we live	Use both hands to make a cup shape and move it around in a circle to show how the Earth revolves around the Sun.
<i>Sleepy Solar System</i>	sun	the biggest star in our solar system, all the planets travel around the sun	Hold one fist in front of you and open and close it with your palm facing out.
<i>Sleepy Solar System</i>	asteroids	small rocks that orbit the sun, like the planets	make a fist with one hand and move it around in front of you in an arcing motion
<i>The Sun is Kind of a Big Deal</i>	planet	a huge natural object that travels around a star, our planet is Earth	hands form a small circle in front of the body



Full List of Unit Vocabulary - Astronomy

Book	Word	Definition	Gesture
<i>The Sun is Kind of a Big Deal</i>	orbit	travel in a circle around something	hold one finger pointing up, and move it around in a circle
<i>The Sun is Kind of a Big Deal</i>	solar eclipse	when the moon moves between the earth and the sun and blocks the sun's light from reach the earth	make two fists with your hands, start them apart and slowly bring them together so one is in front of the other
<i>Birthday on Mars</i>	planet	a huge natural object that travels around a star, our planet is Earth	hands form a small circle in front of the body
<i>Birthday on Mars</i>	lonely	feeling sad to be all by yourself	close eyes and make a frowny face
<i>Birthday on Mars</i>	curious	wanting to learn or know something	use pointer finger and tap raised chin (as if saying hmmm) as if thinking
<i>Kitten's First Full Moon</i>	kitten	a baby cat	thumb and pointer finger on both hands and draw away from mouth like whiskers
<i>Kitten's First Full Moon</i>	full moon	when we can see the whole moon, it is big and round	use both hands to make a circle with your fingers and hold it high above your head
<i>Kitten's First Full Moon</i>	leaped	jump far	Use hand to make a hopping motion, leaping through the air
<i>Ten Twinkly Stars</i>	star	a glowing light in the sky, the sun is our biggest star	Hold one fist in front of you and open and close it with your palm facing out.
<i>Ten Twinkly Stars</i>	gleam	shine, glitter	hold both hands up palms away from you and wiggle your fingers
<i>Ten Twinkly Stars</i>	snooze	sleep	hands on top of each other on left ear and head to side as if sleeping
<i>City Moon</i>	full moon	when we can see the whole moon, it is big and round	use both hands to make a circle with your fingers and hold it high above your head



Full List of Unit Vocabulary - Astronomy

Book	Word	Definition	Gesture
<i>City Moon</i>	crane	stretch so you can see better	lift your head up and look around to try to see better
<i>City Moon</i>	reflection	when light bounces off a shiny surface so you can see two of something	hold hands together and open up and look at hands like looking at reflection
<i>Moon: A Peek-Through Picture Book</i>	shimmering	shining or glowing softly	hold hands out with palms facing down, wiggle your fingers slowly
<i>Moon: A Peek-Through Picture Book</i>	guide	show the way	place hand, palm up, in front of you and gesture outward (as if saying you go first)
<i>Moon: A Peek-Through Picture Book</i>	commands	controls	point sharply in front of you and slightly down
<i>Moon's First Friends</i>	lonely	feeling sad to be all by yourself	close eyes and make a frowny face
<i>Moon's First Friends</i>	astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
<i>Moon's First Friends</i>	ventured	to go and explore somewhere new	hold one hand out flat with palm facing up, use other hand to have two fingers walk on palm
<i>Henry's Stars</i>	constellation	a group of stars that look like something	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
<i>Henry's Stars</i>	clever	very smart	tap the side of your head, near your temple, with your index finger
<i>Our Stars</i>	constellation	a group of stars that look like something	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
<i>Our Stars</i>	orbit	travel in a circle around something	hold one finger pointing up, and move it around in a circle
<i>Our Stars</i>	twinkle	to shine with sparkling light	hold hands in front of you with fingers spread apart, wiggle fingers



Full List of Unit Vocabulary - Astronomy

Book	Word	Definition	Gesture
<i>How to Catch a Star</i>	star	a glowing light in the sky, the sun is our biggest star	Hold one fist in front of you and open and close it with your palm facing out.
<i>How to Catch a Star</i>	sunrise	the time when the sun stars to come up in the morning	hold hands low and close together with palms facing down, raise hands slowly in an arc spreading them apart to show the sun coming up
<i>How to Catch a Star</i>	appear	when something can be seen	hold hands in a fist in front of you and quickly open them up and spread your fingers
<i>I Want to be an Astronaut</i>	astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
<i>I Want to be an Astronaut</i>	crew	a group of astronauts working together	clasp hands together in front of you to show a group working together as one
<i>I Want to be an Astronaut</i>	mission	a job that astronauts do in space	extend one arm like pointing toward the stars
<i>Small World</i>	microscopic	so tiny it can only be seen with a microscope	hold thumb and pointer fingers together with a small amount of space between them up by your eye
<i>Small World</i>	foreign	unfamiliar, strange	put hand on side of head like you are thinking, then extend hand out with palm up and shrug shoulders
<i>Small World</i>	orbit	travel in a circle around something	hold one finger pointing up, and move it around in a circle
<i>Mae Among the Stars</i>	astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
<i>Mae Among the Stars</i>	profession	a job that grown ups do	pretend to type on a keyboard
<i>Mae Among the Stars</i>	disappointed	sad that things didn't go the way you planned	make a frowning face and cross arms
<i>Rocket Says Look Up</i>	telescope	a tool for looking at things that are far away	make two circles with hands and put them on top of each other and up to your eye like looking through a telescope



Full List of Unit Vocabulary - Astronomy

Book	Word	Definition	Gesture
<i>Rocket Says Look Up</i>	meteor	bits of dust burning up in the atmosphere	point up to the sky and make an arch in front of you (like a meteor flying through the sky)
<i>Rocket Says Look Up</i>	prepared	to be ready for something	thumbs up and nod head
<i>Astronaut Training</i>	astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
<i>Astronaut Training</i>	mission	a job that astronauts do in space	extend one arm like pointing toward the stars
<i>Astronaut Training</i>	amazed	feeling very surprised by something	mouth wide open with eyes wide



Active Responding Routines

These are used when asking/answering questions.
Stay away from individual child responses as you want all children actively engaged.

Teacher Prompts	
Thinking About the Answer	Point to Forehead with Finger
Answer all together (choral responding)	Open hand to children to indicate they should respond
Child Responses	
To show they are ready to answer	Thumbs Up Other movements: Stand up, hands in the air
To note if they like something or don't	Thumbs Up/Thumbs Down



For the Teacher:
Preview
A Pig is Big



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 1: *A Pig is Big* by Douglas Florian

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
measure	use a tool to see how big something is	palms touching and move out as if showing width
Earth	the planet where we live	hands form a small circle in front of the body
universe	everything that exists in space, including us, planets and stars	Stretch your arms high above your head then slowly drop them to your sides

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky

(point up to sky)

The sun is in the sky

(point up to sky)

Hot and bright

it gives us light

(ASL sign for light – see pictures)

The sun is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

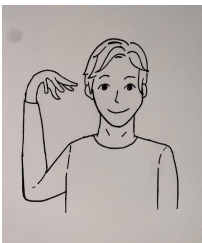
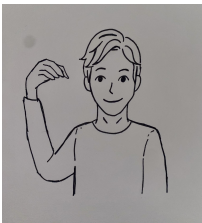
Around and round

the Earth it goes

(make circle with hands)

The moon is in the sky

(point up to sky)



<https://www.tes.com/teaching-resource/space-song-book-301319>
 American Sign Language (ASL) sign for light.
 Pictures created by Madison Taylor



1st Read A Pig is Big



Before

1. **Topic Introduction-** *Today we are starting a new unit. We will be learning about Astronomy. Let's clap that word. A-stron-o-my. Good! Astronomy is the study of outer space. We are going to learn about things that are in space, like stars and planets. Space is huge and many things are very, very far away.*
2. **Book Introduction-** *This book is called A Pig is BIG. I wonder why we are reading about a big pig when we are learning about space. Let's read to find out.*
3. **Title and Author-** Draw attention to title and author. *This book is written by Douglas Florian. He is the author. Who remembers what the author's job is? They... (thinking gesture and then hand open to note choral response - write the words). Yes! You are right, the author writes the words.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"A car. It's bigger than a cow by far."	TA: <i>I can see that the car is bigger than the cow. The pig & the cow fit inside the car. The car is much bigger than the cow.</i>
"A truck."	TA: <i>The truck is even bigger than the car. The truck can haul the car and the pig and cow.</i>
"What's bigger than a city?"	TA: <i>The city is so big. It fits all the streets. Look how small it looks compared to the city.</i>



1st Read A Pig is Big



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Some things are big, other things are bigger. The universe is the biggest of all.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
measure	use a tool to see how big something is <i>Measure means we use a tool to see how big something is. Put your hands together out in front of you and move them apart to show how you might measure something with a measuring tape.</i>	palms touching and move out as if showing width
Earth	the planet where we live <i>Earth is the planet where we live. Use both of your hands to make a circle in front of your body to show the Earth.</i>	hands form a small circle in front of the body
universe	everything that exists in space, including us, planets and stars <i>Everything in space, including us, the planets, and stars are part of the huge universe. Stretch your arms up high above your head. Now drop your arms down to your sides slowly to show that the universe is everything!</i>	stretch your arms high above your head then slowly drop them to your sides



1st Read A Pig is Big



After

1. Ask Questions-

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like reading about all of those things that were bigger than the big pig? (thinking gesture - finger on forehead) Show me a thumbs up if you liked this book.

Check their understanding.

What is bigger than the pig? (thinking gesture - finger on forehead). Put your thumb up when you remember something from the story that was bigger than pig. (Call on 1-2 students with thumbs up to share responses- various answers- cow, car, street, etc.)

What is the biggest of all? (Thinking gesture and then hand open to note choral response- the universe)

2. Review the Vocabulary-

In today's story, we learned 3 new words. Let's clap out our new words

Review each word stating the definition, making the gesture, and then clapping out the word.

Encourage students to say the word and use the gesture with you.

Word Definition to use	Gesture
<i>When we <u>measure</u> we use tools to see how big something is. Ready to clap, mea-sure, measure.</i>	palms touching and move out as if showing width
<i>The <u>Earth</u> is the planet where we live. Earth.</i>	hands form a small circle in front of the body
<i>The <u>universe</u> is everything! Everything in space, including us, the planets, and stars make up the universe. U-ni-verse. Universe.</i>	stretch your arms high above your head then slowly drop them to your sides



1st Read A Pig is Big



After Continued

Ask questions (thinking gesture) with choral responding (open hand gesture).

Are you a part of the universe? Yes or no?

Everyone (yes)

Is the grass a part of the universe? Yes or no?

Everyone (yes)

Is the sun a part of the universe? Yes or no?

Everyone (yes)

Is our classroom a part of the universe? Yes or no?

Everyone (yes)

YES! Everything is part of the Universe!

3. Follow Up Activity- Rhyming Practice

Explain, *There were lots of rhyming words in this book. Remember, rhyming words sound the same at the end. Let's go back and read parts of the book.* Reread the passages. Emphasize the words in bold. Ask *Do those words rhyme? Do they sound the same at the end?* Read the whole passage, emphasizing the words in bold.

- *A truck can haul a car that's **stuck**... bad **luck**.* (Thinking gesture and then hand open to note choral response- yes)
- *That neighborhoods sit side by **side**... to make a city **wide**.* (Thinking gesture and then hand open to note choral response- yes)
- *The universe is wide in **girth**. It is the biggest thing of **all**.* (Thinking gesture and then hand open to note choral response- no)



2nd Read

A Pig is Big



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 1: *A Pig is Big* by Douglas Florian

Re-Read & Activity: Math Activities

Materials Needed: Relative size sorting cards (see Basic Concepts Manual)

Before

1. **Ask if they can remember what this book is about-** show them the cover to remind them.
We have already read this story. Do you remember it? (thinking gesture - finger on forehead) *Look at the cover. Do you remember this big pig? What things were bigger than the pig?* (thinking gesture - finger on forehead) *If you have an idea to share, show a thumbs up.* Encourage all to think about their answer and call on 1-2 students who have their thumbs up.
2. **Point out title & author-** ask if anyone can tell you what the author does.
The title of this story is A Pig is Big. The author of the story is Douglas Florian. Who remembers what the author does? Tell me. (Thinking gesture and then hand open to note choral response- writes the words) *Yes, the author writes the words. The illustrator is also Douglas Florian. What does the illustrator do?* (Thinking gesture and then hand open to note choral response- draw the pictures) *They draw the pictures. Douglas Florian wrote the words and drew the pictures.*
3. **Tell them this time we are going to read and discuss the story** so be ready to share your ideas!
We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

1. **Read** with excitement and fluency.
2. **Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"What's bigger than a cow?"	Q: <i>Do you remember what is bigger than a cow?</i>
"What's bigger than a truck?"	Q: <i>Do you remember what is bigger than a truck?</i>
"Add streets together, and I'll bet A neighborhood is what you'll get."	Q: <i>What do you get when you add streets together?</i>
"The earth's dimensions do excel."	Q: <i>What is the name of our planet?</i>
"It is the biggest thing of all."	Q: <i>What is the biggest of all?</i>



2nd Read

A Pig is Big



During Continued

3. **Draw Attention to Key Events and Vocabulary**- Pause to highlight vocabulary and key concepts.

Key content: Some things are big, other things are bigger. The universe is the biggest of all.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
measure	use a tool to see how big something is <i>Measure means we use tools to see how big something is. Put your hands together out in front of you and move them apart to show how you might measure something.</i>	palms touching and move out as if showing width
Earth	the planet where we live <i>Earth is the planet where we live. Use both of your hands to make a circle in front of your body to show the Earth.</i>	hands form a small circle in front of the body
universe	everything that exists in space, including us, planets and stars <i>Everything in space, including us, the planets, and stars are part of the huge universe. Stretch your arms up high above your head. Now drop your arms down to your sides slowly to show that the universe is everything!</i>	Stretch your arms high above your head then slowly drop them to your sides



2nd Read

A Pig is Big



After

1. Ask Questions

Ask their opinion.

Did you like this book? Tell me why. (thinking gesture - finger on forehead)

Show me a thumb if you liked this book and want to share why. Start your sentence with "I liked this story because..." Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Discussion questions

What is one thing that is bigger than the pig? (thinking gesture - finger on forehead)

If you have an idea to share, show a thumbs up.

Encourage all to think about their answer and call on 1-2 students who have their thumbs up.
(Response - various answers)

What is the name of our planet?

(Thinking gesture and then hand open to note choral response- Earth)

What is the biggest thing of all?

(Thinking gesture and then hand open to note choral response- the universe).

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>When we use tools to see how big something is we _____ it (measure).</i>	palms touching and move out as if showing width
<i>The planet we live on is called _____ (Earth).</i>	hands form a small circle in front of the body
<i>Everything, including us, other planets, and the stars are part of the _____ (universe).</i>	stretch your arms high above your head then slowly drop them to your sides

3. Follow-Up Activity: Relative Size Math Activity - Best Done in Small Groups

Use the relative size cards from the Basic Concepts materials and choose an activity in the Basic Concepts teacher's manual.



For the Teacher:

Preview

I Am Big But I'm Not the Biggest



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 1 (Alternative): *I Am Big, But I'm Not the Biggest* by The Project Ready Team!

Materials Needed: None

Vocabulary

Word	Definition	Gesture
Earth	the planet where we live	hands form a small circle in front of the body
enormous	very big	Outstretched arms with palms facing toward each and spread arms wide apart
universe	everything that exists in space, including us, planets and stars	Stretch your arms high above your head then slowly drop them to your sides

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky

(point up to sky)

The sun is in the sky

(point up to sky)

Hot and bright

it gives us light

(ASL sign for light - see pictures)

The sun is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

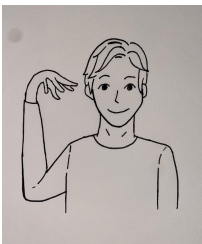
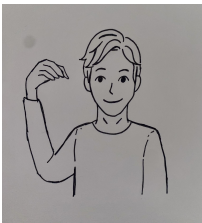
Around and round

the Earth it goes

(make circle with hands)

The moon is in the sky

(point up to sky)



<https://www.tes.com/teaching-resource/space-song-book-301319>

American Sign Language (ASL) sign for light.

Pictures created by Madison Taylor



1st Read

I Am Big But I'm Not the Biggest

Before

1. **Topic Introduction-** *Today we are starting a new unit. We will be learning about Astronomy. Let's clap that word. As-tron-o-my. Good! Astronomy is the study of outer space. We are going to learn about things that are in space, like stars and planets. Space is huge and many things are very, very far away.*
2. **Book Introduction-** *This book is called I Am Big But I'm Not the Biggest. I wonder what that means. What is bigger than a person?*
3. **Title and Author-** Draw attention to title and author. *This book was written by a team of people. The people who write the book are called the _____. (Thinking gesture and then hand open to note choral response- author) That's right the person or people who write a book are the author.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"This is my town..."	TA: <i>I can see that the town is bigger than his house. Look how much bigger the town is than his house!</i>
"This is my continent..."	TA: <i>I remember learning about the continent North America. He lives there, too. North America is so big that it has three main countries inside. What is bigger than North America?</i>
"What's bigger than the enormous solar system?"	TA: <i>The solar system is enormous! It's so big that people haven't traveled all the way through it, even in a big rocket! What's bigger than the solar system?</i>



1st Read

I Am Big But I'm Not the Biggest

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Some things are big, other things are bigger. The universe is the biggest of all.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
Earth	The planet where we live <i>Earth is the planet where we live. Use both of your hands to make a circle in front of your body to show the Earth.</i>	hands form a small circle in front of the body
enormous	Very big <i>Enormous means very big. Hold your hands out in front of you and then spread your arms out wide to show something enormous.</i>	outstretched arms with palms facing toward each and spread arms wide apart
universe	everything that exists in space, including us, planets and stars <i>Everything in space, including us, the planets, and stars are part of the huge universe. Stretch your arms up high above your head. Now drop your arms down to your sides slowly to show that the universe is everything!</i>	stretch your arms high above your head then slowly drop them to your sides



1st Read

I Am Big But I'm Not the Biggest

After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like reading about all of those things that were bigger than the boy? (thinking gesture - finger on forehead) Show me a thumbs up if you liked this book.

Check their understanding.

What is bigger than the boy? (thinking gesture - finger on forehead).

Put your thumb up when you remember something from the story that was bigger than the boy.

(Call on 1-2 students with thumbs up to share responses- various answers)

What is the biggest of all?

(Thinking gesture and then hand open to note choral response- the universe)

2. Review the Vocabulary-

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition, making the gesture, and then clapping out the word. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>The <u>Earth</u> is the planet where we live. Ready to clap? Earth.</i>	hands form a small circle in front of the body
<i><u>Enormous</u> is very big. E-nor-mous, Enormous.</i>	palms facing toward each other and spread arms wide apart
<i>The <u>universe</u> is everything! Everything in space, including us, the planets, and stars make up the universe. U-ni-verse. Universe.</i>	stretch hands high above your head then slowly drop arms to your sides



1st Read

I Am Big But I'm Not the Biggest

After Continued

Ask questions (thinking gesture) with choral responding (open hand gesture).

Use the open hand for choral responding and be sure to make the vocabulary word gesture when saying the word. If many children don't get it, tell them the correct answer and ask the question again.

Is the universe enormous? Yes or no? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - yes)

Is an apple enormous? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - no)

Is the Earth enormous? Yes or no? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - yes)

Is this book enormous? Yes or no? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - no)

3. Follow Up Activity- Was It In the Book?

Explain, *Listen carefully to what I say. If this was in the book, you will nod your head YES. If it wasn't in the book, you will shake your head NO. Practice nodding and shaking.*

- *The boys' little sister is the biggest of all.* (no)
- *The boy is the biggest of all.* (no)
- *The town is the biggest of all.* (no)
- *The country is the biggest of all.* (no)
- *The universe is the biggest of all.* (yes)



2nd Read



I Am Big But I'm Not the Biggest

Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 1 (Alternative): *I Am Big, But I'm Not the Biggest* by The Project Ready Team!

Re-Read & Activity: Math Activities

Materials Needed: Relative size sorting cards (see Basic Concepts Manual)

Before

- Ask if they can remember what this book is about-** show them the cover to remind them.
We have already read this story. Do you remember it? Look at the cover. Do you remember this boy? What things were bigger than the boy? (thinking gesture - finger on forehead). *Put your thumb up when you remember something from the story that was bigger than the boy.* (Call on 1-2 students with thumbs up to share responses- various answers- his house, his country, etc.)
- Point out title & author-** ask if anyone can tell you what the author does.
The title of this story is I Am Big, But I'm Not the Biggest. The author of the story is The Project Ready! Team. Who remembers what the author does? Tell me. (Thinking gesture and then hand open to note choral response) *Yes, the author writes the words. A whole team of people worked together to write these words. The illustrator is Maddie Taylor. What does the illustrator do?* (Thinking gesture and then hand open to note choral response) *They draw the pictures. Maddie Taylor drew the beautiful pictures.*
- Tell them that this time we are going to read and discuss the story** so be ready to share your ideas!
We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

- Read** with excitement and fluency.
- Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"What's bigger than me?"	Q: <i>Do you remember what is bigger than the boy?</i>
"What's bigger than my town?"	Q: <i>Do you remember what is bigger than his town?</i>
"This is my country."	Q: <i>What country does he live in?</i>
"This is my planet, Earth"	Q: <i>What is the name of our planet?</i>
"The universe is the biggest thing of ALL"	Q: <i>What is the biggest of all?</i>



2nd Read

I Am Big But I'm Not the Biggest



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Some things are big, other things are bigger. The universe is the biggest of all.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
Earth	the planet where we live <i>Earth is the planet where we live. The Earth is big! Use both of your hands to make a circle in front of your body to show the Earth.</i>	hands form a small circle in front of the body
enormous	very big <i>Enormous means very big. The solar system is enormous! Hold your hands out in front of you with your palms together and then spread your arms out apart wide to show something is enormous.</i>	palms facing toward each other and spread arms wide apart
universe	everything that exists in space, including us, planets and stars <i>Everything in space, including us, the planets, and stars are part of the huge universe. Stretch your arms up high above your head. Now drop your arms down to your sides slowly to show that the universe is everything!</i>	stretch your arms high above your head then slowly drop them to your sides



2nd Read

I Am Big But I'm Not the Biggest



After

1. Ask their opinion.

Did you like this book? Tell me why? (thinking gesture - finger on forehead)

Show me a thumbs up if you liked this book and want to share why. Start your sentence with "I liked this story because..." Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Discussion questions

What is one thing that is bigger than the boy? (thinking gesture - finger on forehead)

If you have an idea to share, show a thumbs up.

Encourage all to think about their answer and call on 1-2 students who have their thumbs up.
(Response - various answers)

What is smaller than the boy? (Thinking gesture and then hand open to note choral response- his little sister)

What is the biggest thing of all? (Thinking gesture and then hand open to note choral response- the universe)

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture.

Encourage students to say the word and use the gesture with you.

Word Definition to use	Gesture
<i>The planet we live on is called _____ (Earth). Ready to clap? Earth.</i>	hands form a small circle in front of the body
<i>When something is very big it is _____ (enormous). E-nor-mous. Enormous.</i>	palms facing toward each other and spread arms wide apart
<i>Everything, including us, other planets, and the stars are part of the _____ (universe). Let's clap it. U-niv-erse. Universe.</i>	With hands open in front of you (all 5 fingers spread wide) and palms facing out, move your hands above your head and then spread arms out to your side and back down.

3. Follow-Up Activity: Relative Size Math Activity

Use the relative size cards from the Basic Concepts materials and lesson in the teacher's manual.



For the Teacher:

Preview

Here We Are: Notes for Living on Planet Earth

Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 2: *Here We Are: Notes for Living on Planet Earth* by Oliver Jeffers

Materials Needed: None

Vocabulary

Word	Definition	Gesture
Earth	the planet where we live	hands form a small circle in front of the body
complicated	difficult to understand, with lots of pieces	shrug your shoulders and hold hands up in front of your chest with palms up to the ceiling
patient	to wait calmly	put your hands together and gently put them in your lap

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky

(point up to sky)

The sun is in the sky

(point up to sky)

Hot and bright

it gives us light

(ASL sign for light – see pictures)

The sun is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

Around and round

the Earth it goes

(make circle with hands)

The moon is in the sky

(point up to sky)



<https://www.tes.com/teaching-resource/space-song-book-301319>

American Sign Language (ASL) sign for light.

Pictures created by Madison Taylor



1st Read

Here We Are: Notes for Living on Planet Earth

Before

1. **Topic Introduction-** *Yesterday we started learning about astronomy, the study of outer space. Let's clap astronomy. As-tron-o-my. We learned, yesterday, that the universe is the biggest thing of all.*
2. **Book Introduction-** *I see a planet and I see little things going around the planet. This looks like an airplane. I wonder what these other things are. This book is called Here We Are: Notes for Living on Planet Earth. I think this planet is Earth.*
3. **Title and Author-** Draw attention to title and author *Oliver Jeffers is the author and the illustrator of this book. Who remembers what the author does? (thinking gesture and then hand open to note choral response - write the words)*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
Title Page	TA: <i>This (point to drawing) is the author and his new baby. This story is a note from the author to his new baby. That will help us understand the book.</i>
"as space is very big"	TA: <i>Space is very big, but the universe is the biggest thing of all.</i>
"So be kind. There is enough for everyone"	TA: <i>It is so important to be kind. We can be kind to everyone and we can be kind to our Earth.</i>



1st Read

Here We Are: Notes for Living on Planet Earth

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: There are many people and animals on Earth. Earth is fascinating; there is so much to see and do! Earth is part of the solar system.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
Earth	the planet where we live <i>Earth is the planet where we live. We live there. Use both of your hands to make a circle in front of your body to show the Earth.</i>	hands form a small circle in front of the body
complicated	difficult to understand, with lots of pieces <i>Learning about the sky is complicated. Shrug your shoulders with your hands up like this to show that complicated means difficult to understand.</i>	shrug your shoulders and hold hands up in front of your chest with palms up to the ceiling
patient	to wait calmly <i>It is important to be patient as we learn about the Earth and the sky. To show being patient, put your hands together and gently put them in your lap.</i>	put your hands together and gently put them in your lap



1st Read

Here We Are: Notes for Living on Planet Earth

After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

I liked that book! Earth is fascinating! There is so much to learn about. I like learning about the ocean. What was your favorite part? (thinking gesture - finger on forehead) If you have an idea to share, show a thumbs up. When you share, start your sentence with "My favorite part was..."

Encourage all to think about their answer and call on 1-2 students who have their thumbs up.

Check their understanding.

What is the name of the planet we live on?

(Thinking gesture and then hand open to note choral response- Earth)

Earth has two parts—Land and Water. Who lives on the land? (thinking gesture - finger on forehead).

Put your thumb up when you remember who lives on the land. (Call on 1-2 students with thumbs up to share responses- various answers- people, animals, etc.)

Who lives in the water, the ocean?

(Thinking gesture and then hand open to note choral response- animals)

2. Review the Vocabulary-

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition, making the gesture, and then clapping out the word. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>The <u>Earth</u> is the planet where we live. Ready to clap? Earth.</i>	hands form a small circle in front of the body
<i><u>Complicated</u> means that something is difficult to understand or has a lot of pieces. Com-pli-ca-ted, complicated.</i>	shrug your shoulders and hold hands up in front of your chest with palms up to the ceiling
<i><u>Patient</u> is when you wait calmly. Pa-tient, patient.</i>	put your hands together and gently put them in your lap



1st Read

Here We Are: Notes for Living on Planet Earth

After Continued

Ask questions (thinking gesture) with choral responding (open hand gesture).

Use the open hand for choral responding and be sure to make the vocabulary word gesture when saying the word. If many children don't get it, tell them the correct answer and ask the question again.

Is it complicated to put together a puzzle that has a lot of pieces? Yes or no?

Everyone (yes)

Is learning to play an instrument complicated?

Everyone (yes)

Is brushing your teeth complicated? Yes or no?

Everyone (no)

Is picking out a book to read complicated? Yes or no?

Everyone (no)

3. **Follow Up Activity-** Game: Was it in the Book?

Explain, *We are going to play a game called Was it in the Book? I'm going to say a fact. You will show me a thumbs up if the fact was in the book and a thumbs down if it wasn't in the book.* Practice thumbs up and down.

Show pictures from the book to help guide answering the questions.

- *We live on a planet called Mars.* (thumbs down - no)
- *We live on a planet called Earth.* (thumbs up - yes)
- *Only a few people live on the Earth.* (thumbs down- no)
- *Many, many people live on the Earth.* (thumbs up- yes)



For the Teacher:

Preview

Me and My Place in Space



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 3: *Me and My Place in Space* by Joan Sweeney

Materials Needed: None

Vocabulary

Word	Definition	Gesture
planet	a huge natural object that travels around a star, our planet is Earth	hand forms a small circle in front of the body
solar system	everything that travels around the sun, including eight planets	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
universe	everything that exists in space, including us, planets and stars	stretch your arms high above your head then slowly drop them to your sides

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky

(point up to sky)

The sun is in the sky

(point up to sky)

Hot and bright

it gives us light

(ASL sign for light –see pictures)

The sun is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

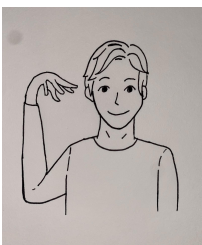
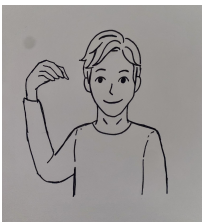
Around and round

the Earth it goes

(make circle with hands)

The moon is in the sky

(point up to sky)



<https://www.tes.com/teaching-resource/space-song-book-301319>

American Sign Language (ASL) sign for light.

Pictures created by Madison Taylor



1st Read

Me and My Place in Space

Before

1. **Topic Introduction-** *We have been reading about Astronomy, the study of space. Let's clap that word. As-tron-o-my. We learned that the universe is huge. Everything in space is part of our universe.*
2. **Book Introduction-** *This looks like a really fun book. I see a person in a rocket ship. It looks like she is in space!*
3. **Title and Author-** Draw attention to title and author *The title is Me and My Place in Space. The author is Joan Sweeney. What does the author do? (thinking gesture and then hand open to note choral response - write the words) We read another book she wrote about maps.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"Tonight, I can see the Moon from my place in space."	<p>TA: <i>Sometimes I can see the moon.</i></p> <p>Q: <i>Have you ever noticed the moon in the sky?</i></p>
"as big as a million Earths"	<p>TA: <i>Wow! I didn't know the sun was so big!</i></p>
"You could travel for trillions of years and never get to the other side."	<p>TA: <i>The universe is enormous! Our solar system is just one tiny part of the universe.</i></p>



1st Read

Me and My Place in Space

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: The Earth is in a solar system with 7 other planets that orbit around the sun. The universe is HUGE!

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
planet	a huge natural object that travels around a star, our planet is earth <i>This globe is a model of our planet, Earth. Put both of your hands out in front of you to make a circle in front of your body to show a planet.</i>	hand forms a small circle in front of the body
solar system	everything that travels around the sun, including eight planets <i>The solar system is everything that travels around the sun. Hold one hand out in a fist, that is the sun. Use your other hand to show the planets that travel around the sun.</i>	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
universe	everything that exists in space, including us, planets and stars <i>The universe is so big, no one has ever traveled all the way across it. Stretch your arms high above your head and drop them slowly to show the universe is everything!</i>	stretch your arms high above your head then slowly drop them to your sides



1st Read

Me and My Place in Space

After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like learning about space? My favorite part was learning about the other planets in the solar system. What was your favorite part? (thinking gesture - finger on forehead).

Put your thumb up when you have something you want to share. Start your sentence with "My favorite part was..." Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Check their understanding.

What do all the planets orbit (or go) around? (Thinking gesture and then hand open to note choral response-the sun)

Which is bigger, the sun or the Earth? (Thinking gesture and then hand open to note choral response-the sun)

2. Review the Vocabulary-

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition, making the gesture, and then clapping out the word. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>planet</u> is a huge natural object that travels around a star, our planet is Earth. Ready to clap? Plan-et, planet.</i>	hand forms a small circle in front of the body
<i>The <u>solar system</u> is everything that travels around the sun, including eight planets. So-lar sys-tem, solar system.</i>	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
<i>The <u>universe</u> is everything! Everything in space, including us, the planets, and stars make up the universe. U-ni-verse. Universe.</i>	stretch your arms high above your head then slowly drop them to your sides



1st Read

Me and My Place in Space

After Continued

Ask questions (thinking gesture) with choral responding (open hand gesture).

Is a planet part of the solar system? Yes or no?

Everyone (yes)

Is a planet part of the universe? Yes or no?

Everyone (yes)

Is the solar system part of the universe? Yes or no?

Everyone (yes)

3. **Follow Up Activity-** Introduce observatory center

Show the children the items in the center. Explain and model how to use the items appropriately. Ensure that a teacher is available near this area to help guide children until they are independent in their play and exploration. The teacher can also suggest play ideas while encouraging the use of new vocabulary and background knowledge.





2nd Read

Me and My Place in Space



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 3: *Me and My Place in Space* by Joan Sweeney

Re-Read & Activity: Solar System Activity

Materials Needed: Planet cut-outs

Before

- Ask if they can remember what this book is about-** show them the cover to remind them.
We have already read this story. Do you remember it? Look at the cover. What is this girl riding in? (Thinking gesture and then hand open to note choral response- spaceship) *A spaceship! We learned about space in this book. What other space things do you see on this cover?* (thinking gesture - finger on forehead) *If you have an idea to share, show a thumbs up.* Encourage all to think about their answer and call on 1-2 students who have their thumbs up.
- Point out title & author-** ask if anyone can tell you what the author does.
The title of this story is Me and My Place in Space. The author of the story is Joan Sweeney. Who remembers what the author does? Tell me! (Thinking gesture and then hand open to note choral response- writes the words) *Yes, the author writes the words. The illustrator is Christine Gore. She made the pictures.*
- Tell them this time we are going to read and discuss the story** so be ready to share your ideas!
We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

- Read** with excitement and fluency.
- Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"The Earth travels in a path around the Sun."	Q: <i>What does the Earth travel around?</i>
"On Mercury"	Q: <i>How many syllables in the name of that planet? Let's clap it to find out.</i>
"Jupiter is a massive ball of gas, bigger than all the other planets combined."	Q: <i>What is the biggest planet in our solar system?</i>
"Neptune looks like a blue twin of Uranus."	Q: <i>Why are there snowflakes on these pages?</i> (it is very cold on Uranus and Neptune)



2nd Read

Me and My Place in Space



During Continued

3. **Draw Attention to Key Events and Vocabulary**- Pause to highlight vocabulary and key concepts.

Key content: The Earth is in a solar system with 7 other planets that orbit around the sun. The universe is HUGE!

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
planet	a huge natural object that travels around a star, our planet is earth <i>This globe is a model of our planet, Earth. Put both of your hands out in front of you to make a circle in front of your body to show a planet.</i>	hand forms a small circle in front of the body
solar system	everything that travels around the sun, including eight planets <i>The solar system is everything that travels around the sun. Hold one hand out in a fist; that is the sun. Use your other hand to show the planets that travel around the sun.</i>	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
universe	everything that exists in space, including us, planets and stars <i>The universe is so big, no one has ever traveled all the way across it. Stretch your arms up high above your head. Now drop your arms down to your sides slowly to show that the universe is everything!</i>	stretch your arms high above your head then slowly drop them to your sides



2nd Read

Me and My Place in Space



After

1. Ask their opinion.

Did you like this book? Tell me why? (thinking gesture - finger on forehead)

Show me a thumb if you liked this book and want to share something that you learned. Start your sentence with "I learned..." Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Discussion questions

Where does this story take place? (thinking gesture then open hand to note choral response- in space)

What does the girl see as she travels through space? (thinking gesture - finger on forehead) *If you have an idea to share, show a thumbs up.* Encourage all to think about their answer and call on 1-2 students who have their thumbs up. (Response - various answers- moon, planets, etc.)

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words. Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>Earth is the name of our _____ (planet). Plan-et. Planet.</i>	hand forms a small circle in front of the body
<i>Everything that travels around the sun, including the eight planets is called the _____ (solar system). So-lar sys-tem.</i>	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
<i>Everything, including us, other planets, and the stars are part of the _____ (universe). U-niv-erse. Universe.</i>	stretch your arms high above your head then slowly drop them to your sides

3. Follow-Up Activity: Solar System Activity

After reading the story (or parts of the story) again, introduce the solar system activity. This activity will require 9 people. It might need to be done in whole group, depending on your class size. Regardless, make sure you repeat this activity so that everyone gets a turn to be a planet. Explain that the students are going to become the solar system.

Create a model of the solar system using these steps:

- Show the students the sun.
- Encourage them to say "sun" and clap the syllables.
- Show the page in the book about the sun and remind them of a few key facts.
- Assign one student to be the sun. Give them the sun cut out to hold.
- Continue with the above steps for each planet.
- Move quickly and keep this brief. .
- Once all planets are lined up in order, encourage the students to orbit (travel around) the sun while remaining in their same order.

Keep this activity brisk and brief- no more than 7-8 minutes.



Shared Writing

Me and My Place in Space



Planning Guide - Express Ideas

Topic Sentence: Write the topic sentence on the board, leaving a blank space for the underlined word:

What is a solar system?

Plan your detail and concluding sentences (You can utilize the following.)

Detail: A solar system is the sun and planets that move around it.

Detail: We have nine planets in our solar system.

Detail: There are many other solar systems in our universe.

Conclusion: This is what we know about solar systems.

Vocabulary to Include if Possible

Word	Definition	Gesture
planet	a huge natural object that travels around a star, our planet is Earth	hand forms a small circle in front of the body
solar system	everything that travels around the sun, including eight planets	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
universe	everything that exists in space, including us, planets and stars	stretch your arms high above your head then slowly drop them to your sides

Let's Write!

Discuss the book and vocabulary: *We read this book called Me and My Place in Space. Do you remember how this girl traveled through space? What did she see on her journey through space? Do you remember the name of any planets she saw in our solar system?* (thinking gesture - finger on forehead) *If you have an idea to share, show a thumbs up.* Encourage all to think about their answer and call on 1-2 students who have their thumbs up to share responses- various answers) *What is the name we use for everything in space?* (thinking gesture and then hand open to note choral response- the universe) *The universe! The universe is so unbelievably big. It's the biggest thing!*



Shared Writing

Me and My Place in Space



Write Topic Sentence

1. **Plan:** *Let's work together to answer this question. What is a solar... Hmm... What word is missing?* (thinking gesture - finger on forehead and then hand open to note choral response - system)
2. **Write:** Write system to complete the sentence. Point out the question mark as you write it. Explain the function of the question mark. *This symbol means we are asking a question. A question needs an answer.*
3. **Read aloud, pointing to each word:** *What is a solar system?*

Write Detail Sentence(s)

1. **Plan:** *Let's answer that question. What do we know about solar systems?* Guide children by showing them a few pictures in the book, if necessary. Remember the planned detail sentences are available if your students need more direction. Otherwise, write the ideas they share.
2. **Write:** *A solar system is the sun and planets that move around it.*
3. **Read** aloud, pointing to each word: *A solar system is the sun and planets that move around it.* Read again, encouraging children to read with you.

Continue adding detail sentences if students are engaged. This can also be returned to tomorrow or added to later in the day.

Write Concluding Sentence

1. **Plan:** *We used facts to answer that question about solar systems. Now, how do we tell our readers that we are done answering the question?*
2. **Write:** *This is what we know about solar systems.*
3. **Read aloud, pointing to each word:** *This is what we know about solar systems.* Read again, encouraging children to read with you

Read the whole paragraph with students. Post writing where they can see it.



For the Teacher:

Preview

Planets



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 4: *Planets* by Becky Baines

Materials Needed: Dramatic Play Center ready for play

Vocabulary

Word	Definition	Gesture
planet	a huge natural object that travels around a star, our planet is Earth	hand forms a small circle in front of the body
solar system	everything that travels around the sun, including eight planets	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
galaxy	a group of solar systems that stay together, we live in the Milky Way galaxy	hold hands in front of you with palms facing each other, move your hands in circular motions wiggling your fingers.
universe	everything that exists in space, including us, planets and stars	stretch your arms high above your head then slowly drop them to your sides

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky
(point up to sky)

The sun is in the sky
(point up to sky)

Hot and bright
it gives us light
(ASL sign for light)

The sun is in the sky
(point up to sky)

The moon is in the sky
(point up to sky)

The moon is in the sky
(point up to sky)

Around and round
the Earth it goes
(make circle with hands)

The moon is in the sky
(point up to sky)

<https://www.tes.com/teaching-resource/space-song-book-301319>
ASL- light



1st Read Planets



Before

1. **Topic Introduction-** *We have been learning all about our astronomy. Astronomy is the study of space. Let's clap the word astronomy. As-tron-o-my. We have learned so much about space. Put your thumb up if you want to tell us one thing you have learned about space.* (thinking gesture - finger on forehead). *Put your thumb up when you have something you want to share. Start your sentence with "I learned..."* Encourage all to think about their answer and call on 1-2 students who have their thumb up.
2. **Book Introduction-** *This story is called Planets. It is a non-fiction book. We are going to be learning about something. What do you think we will learn about?*
3. **Title and Author-** Draw attention to title and author. *The author of this book is Becky Baines. That means that she...* (thinking gesture and then hand open to note choral response - wrote the words) *Right! She wrote the words for this book.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"And people, too."	TA: <i>So many interesting things live on Earth, but Earth is the only planet in our solar system that has living things. I think that is so neat!</i>
"Can you find Earth?"	TA: <i>Everyone point to our planet and say, "Earth!"</i>
"The Milky Way is just one of hundreds of billions of galaxies in the universe."	TA: <i>Wow! The universe is so big!</i>



1st Read Planets



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Earth is the third planet from the sun in our solar system. Our solar system is part of the Milky Way galaxy. The universe is HUGE!

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
planet	a huge natural object that travels around a star, our planet is earth <i>Our planet looks like a blue and green marble when you look at it from space. Put both of your hands out in front of you to make a circle in front of your body to show a planet.</i>	hand forms a small circle in front of the body
solar system	everything that travels around the sun, including eight planets <i>Earth is the third planet from the sun in our solar system. Hold one hand out in a fist, that is the sun. Use your other hand to spread your fingers out and move them around your fist in a circle like they are the planets.</i>	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
galaxy	a group of solar systems that stay together, we live in the Milky Way galaxy <i>Scientists have counted 500 other solar systems in our galaxy. Hold your hands in front of you with your palms facing each other but not touching. Move your hands in a circle and wiggle your fingers to show a galaxy.</i>	hold hands in front of you with palms facing each other, move your hands in circular motions wiggling your fingers.
universe	everything that exists in space, including us, planets and stars <i>There are hundreds of billions of galaxies in our universe! Stretch your arms up high and then drop them to your sides. This shows that the universe is everything!</i>	stretch your arms high above your head then slowly drop them to your sides



1st Read Planets



After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you enjoy this book? (thinking gesture - finger on forehead).
Put your thumb up if you enjoyed reading this book.

Check their understanding.

What was this story about? (thinking gesture - finger on forehead). *Put your thumb up when you remember what this story is about.* (Call on 1-2 students with thumbs up to share responses- various answers- planets, solar systems, galaxies, etc.)

Where is Earth in our solar system? (Thinking gesture and then hand open to note choral response- the third planet from the Sun)

2. Review the Vocabulary-

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition, making the gesture, and then clapping out the word. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>planet</u> is a huge natural object that travels around a star, our planet is Earth. Ready to clap? Plan-et, Planet</i>	hand forms a small circle in front of the body
<i>The <u>solar system</u> is everything that travels around the sun including eight planets. So-lar sys-tem, solar system.</i>	hold one hand out in a fist. Using the other hand spread your fingers out and wiggle around the fist.
<i>A <u>galaxy</u> is a group of solar systems that stay together, we live in the Milky Way galaxy. Gal-ax-y, galaxy.</i>	hold hands in front of you with palms facing each other, move your hands in circular motions wiggling your fingers.
<i>The <u>universe</u> is everything! Everything in space, including us, the planets, and stars. U-ni-verse, Universe.</i>	stretch your arms high above your head then slowly drop them to your sides



1st Read Planets



After Continued

Ask questions

The Milky Way is our gal_____.

(thinking gesture - finger on forehead and hand open to note choral response - galaxy)

Earth is our_____.

(thinking gesture - finger on forehead and hand open to note choral response - planet)

The eight planets and the sun make up our solar _____.

(thinking gesture - finger on forehead and hand open to note choral response - solar system)

Everything is part of the _____.

(thinking gesture - finger on forehead and hand open to note choral response - universe)

3. **Follow Up Activity-** Game: Was it in the Book?

Explain, *We are going to play a game called Was it in the Book? I'm going to say a fact.* (thinking gesture) *You will show me a thumbs up if the fact was in the book and a thumbs down if it wasn't in the book.* Practice thumbs up and down.

- *Earth is the fifth planet from the sun.* (thumbs down- no)
- *Earth is the third planet from the sun.* (thumbs up- yes)
- *Earth has rings around it.* (thumbs down- no)
- *Earth has one moon.* (thumbs up- yes)



For the Teacher:
Preview
On the Launch Pad



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 5: *On the Launch Pad* by Michael Dahl

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
tasks	jobs, work that must get done	Hold one hand flat, palm facing toward you like it is a notepad, use the other hand to check off items on a list
engineer	a scientist who creates and builds things	Hold your pointer finger up next to your head
fuel	what we put in the rocket (and our car) to give it power to go!	Make a fist with one hand and pretend you are filling up your car with gas

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky
(point up to sky)

The sun is in the sky
(point up to sky)

Hot and bright
it gives us light
(ASL sign for light)

The sun is in the sky
(point up to sky)

The moon is in the sky
(point up to sky)

The moon is in the sky
(point up to sky)

Around and round
the Earth it goes
(make circle with hands)

The moon is in the sky
(point up to sky)

<https://www.tes.com/teaching-resource/space-song-book-301319>
ASL- light



1st Read

On the Launch Pad



Before

1. **Topic Introduction-** *What have we been learning about? Astronomy! Astronomy is the study of space. Can you tell me one thing that is in space?* (thinking gesture - finger on forehead) *Thumbs up when you have an answer.* (Various answers. Call on 1-2 students)
2. **Book Introduction-** *When I look at the cover of this book, I see a rocket ship. It looks like someone might be inside. I think this book might be about someone going into space on a rocket. Let's read to find out if I'm correct.*
3. **Title and Author-** Draw attention to title and author *This book is called On the Launchpad. Michael Dahl wrote the words for this book. What do we call the person who wrote the words?* (thinking gesture and then hand open to note choral response - the author) *Right! The author writes the words.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"Twelve stars twinkle in the morning sky." (p. 3)	TA: <i>This is a counting book, but we didn't start counting where we normally do. We started with twelve. I wonder what the next number will be in this counting book.</i>
"Eleven workers take care of tasks." (p. 4)	TA: <i>Oh! I understand now! We are counting backward. We started at 12, now we're at 11 and we're counting as the rocket gets ready to blast off into space.</i>
"Six astronauts ride the elevator." (p. 13)	TA: <i>Here are the astronauts. They have to ride an elevator to get into the rocket. The rocket must be very big.</i>



1st Read

On the Launch Pad



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Numbers tell us how many. We say numbers when we count. Lots of work must be done before a rocket can blast off!

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
tasks	jobs, work that must get done <i>Tasks are jobs or work that must get done. Make a notebook with one hand then use your other hand to check off a task.</i>	Hold one hand flat, palm facing toward you like it is a notepad, use the other hand to check off items on a list
engineer	a scientist who creates and builds things <i>An engineer is a scientist who creates and builds things. Hold your pointer finger up next to your head like you have a good idea.</i>	Hold your pointer finger up next to your head
fuel	what we put in the rocket (and our car) to give it power to go <i>Fuel is what we put in a rocket or a car to give it power to go. Pretend you are filling up your car with gas, or fuel.</i>	Make a fist with one hand and pretend you are filling up your car with gas



1st Read

On the Launch Pad



After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you enjoy counting the items in this book? What did you like counting best?

(thinking gesture -finger on forehead).

Put your thumb up when you have something that you liked counting. Turn to someone and ask, "What did you like counting?"

Check their understanding.

What did we count in this book? (thinking gesture - finger on forehead). *Put your thumb up when you remember something that we counted in this book.* (Call on 1-2 students with thumbs up to share responses- various answers- trucks, windows, etc.)

How did we count in this book? (Thinking gesture and then hand open to note choral response- backwards, the numbers got smaller)

2. Review the Vocabulary-

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition, making the gesture, and then clapping out the word. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>Tasks are jobs or work that must get done. Ready to clap? Tasks</i>	Hold one hand flat, palm facing toward you like it is a notepad, use the other hand to check off items on a list
<i>An engineer is a scientist who creates and builds things. En-gin-eer, Engineer.</i>	Hold your pointer finger up next to your head
<i>Fuel is what we put in the rocket or our car to give it power to go. Fuel.</i>	Make a fist with one hand and pretend you are filling up your car with gas



1st Read

On the Launch Pad



After Continued

Ask questions - provide the first sound as a clue!

If your teacher asks you to go put on your jacket that is a t-_____ (task).

(thinking gesture - finger on forehead and hand open to note choral response.)

When we put gas in our car we are giving it f-_____ (fuel).

(thinking gesture - finger on forehead and hand open to note choral response.)

Someone who builds a rocket is called an en-_____ (engineer).

(thinking gesture - finger on forehead and hand open to note choral response.)

3. Follow Up Activity- Math Word Problem

Explain, *We counted different things as we watched a rocket get ready to blast off. Let's do an addition problem about the parts of a rocket. On the rocket, we counted four windows. (hold up 4 fingers) and two engines (hold up 2 fingers). How many rocket parts is that in all? (Wiggle fingers as you count.) 1,2,3,4,5,6. Four plus two equals six. Say that with me and show me your fingers. Four plus two equals six. Thank you for helping me with that addition problem.*



For the Teacher:

Preview

Sleepy Solar System



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 6: *Sleepy Solar System* by John Hutton

Materials Needed: None

Vocabulary

Word	Definition	Gesture
Earth	the planet where we live	hands form a small circle in front of the body
sun	the biggest star in our solar system, all the planets travel around the sun	make a fist in front of you and open and close it with your palm facing out
asteroid	small rocks that orbit the sun, like the planets	make a fist with one hand and move it around in front of you in an arcing motion

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky

(point up to sky)

The sun is in the sky

(point up to sky)

Hot and bright

it gives us light

(ASL sign for light)

The sun is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

Around and round

the Earth it goes

(make circle with hands)

The moon is in the sky

(point up to sky)

<https://www.tes.com/teaching-resource/space-song-book-301319>

ASL- light



1st Read

Sleepy Solar System

Before

1. **Topic Introduction-** *We have been learning about the study of space, astronomy. Who can tell me the name of a planet?* (thinking gesture - finger on forehead). *Put your thumb up when you remember the name of a planet.* (Call on 1-2 students with thumbs up to share responses- various answers)
2. **Book Introduction-** *This picture looks so silly! I think these big, round things might be planets. It looks like they are tucked into bed. Do you think real planets sleep in a bed?* (Thinking gesture and then hand open to note choral response- no) *No!*
3. **Title and Author-** Draw attention to title and author. *This book is called Sleepy Solar System. The author is Dr. John Hutton. Who remembers what the author does? Tell me.* (Thinking gesture and then hand open to note choral response- writes the words) *Yes, the author writes the words.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"in the starry Milky Way"	TA: <i>I remember learning about the Milky Way. That's the name of our galaxy, where our solar system is.</i>
"puts a cozy nightgown on"	TA: <i>That's so silly! Venus is a real planet in our solar system, but I don't think Venus actually wears a nightgown. Q: Do you?</i>
"Saturn brushes its rings"	TA: <i>Saturn has rings made of ice and rock.</i> Q: <i>Do you think Saturn really brushes its rings?</i>



1st Read

Sleepy Solar System

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: There are eight planets in our solar system. Each planet is unique.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
Earth	the planet where we live <i>Earth is our planet. Use both of your hands to make a circle in front of your body to show the Earth.</i>	hands form a small circle in front of the body
sun	the biggest star in our solar system, all the planets travel around the sun <i>The sun is the biggest star in our solar system. Use your hand to make a fist in front of you. Then open and close it to show how the sun shines.</i>	make a fist in front of you and open and close it with your palm facing out
asteroid	small rocks that orbit the sun, like the planets <i>The asteroids zoom across the sky. Make a fist with one hand and move it around in front of you in a shape like a rainbow.</i>	make a fist with one hand and move it around in front of you in an arcing motion



1st Read

Sleepy Solar System

After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like reading that silly book? I liked reading about real planets that do make believe things.

Thumbs up if you liked that, too. (thinking gesture - finger on forehead)

Show me a thumbs up if you liked this silly book.

Check their understanding.

What were the planets doing in this book?

(Thinking gesture and then hand open to note choral response- getting ready for bed)

How many planets were in this story?

(Thinking gesture and then hand open to note choral response- eight)

What do all of the planets travel around?

(Thinking gesture and then hand open to note choral response- the sun)

2. Review the Vocabulary-

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition, making the gesture, and then clapping out the word. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>The <u>Earth</u> is the planet where we live. Ready to clap? Earth.</i>	hands form a small circle in front of the body
<i>The <u>sun</u> is the biggest star in our solar system, all the planets travel around the sun. Sun.</i>	make a fist in front of you and open and close it with your palm facing out
<i><u>Asteroids</u> are small rocks that orbit the sun, like the planets do. As-ter-oid, Asteroid.</i>	make a fist with one hand and move it around in front of you in an arcing motion



1st Read

Sleepy Solar System

After Continued

Ask questions

Provide the first sound in the word if you think they need a clue!

What is the name of the planet that we live on? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - Earth)

What star does the Earth travel, or orbit, around? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - the sun)

What do you call small rocks that orbit around the sun? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - asteroids)

3. Follow Up Activity- Rhyming Practice

Explain, *There were lots of rhyming words in this book. Remember, rhyming words sound the same at the end. Let's go back and read parts of the book.* Reread the passages. Emphasize the words in bold. Ask, *Do those words rhyme? Do they sound the same at the end?* Read the whole passage, emphasizing the words in bold.

- *It's been a long, busy **day** in the starry Milky **Way**.*
(Thinking gesture and then hand open to note choral response- yes)
- *Sleepy, setting Sun calls **out**, "Bedtime, **everyone**.*
(Thinking gesture and then hand open to note choral response- no)
- *As asteroids zoom and **fly** across the twinkling **sky**.*
(Thinking gesture and then hand open to note choral response- yes)
- *And as mellow Father **Moon** turns on a pale night **light**...*
(Thinking gesture and then hand open to note choral response- no)



2nd Read

Sleepy Solar System



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 6: *Sleepy Solar System* by John Hutton

Re-Read & Activity: Craft - Solar System Book

Materials Needed: Solar system booklets (1 for each student), coloring tools (crayons, markers, paint, etc.)

Before

- Ask if they can remember what this book is about-** show them the cover to remind them.
We have already read this story. Do you remember it? Look at the cover. What are these big, round things? (Thinking gesture and then hand open to note choral response- planets) *Yes, they are planets. What are the planets doing?* (Thinking gesture and then hand open to note choral response- going to bed) *Going to bed!*
- Point out title & author-** ask if anyone can tell you what the author does.
The title of this story is Sleepy Solar System. The author is Dr. John Hutton. Who remembers what the author does? Tell me! (Thinking gesture and then hand open to note choral response- writes the words) *Yes, the author writes the words. The illustrator is Doug Cenko. He made the pictures.*
- Tell them this time we are going to read and discuss the story** so be ready to share your ideas!
We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

- Read** with excitement and fluency.
- Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"Dizzy Mercury says, 'At least-been spinning so fast.'"	Q: <i>Why is Mercury dizzy?</i> (It spins very fast, much faster than Earth.)
"Mother Earth is sleepy too, in pajamas green and blue?"	Q: <i>Why is Earth wearing green and blue pajamas?</i> (Earth is green and blue)
"...with a bubbly toothbrush thing."	Q: <i>What is Saturn brushing?</i> (its rings)
"over icy, chilly feet"	Q: <i>Why does Neptune have icy, chilly feet?</i> (Neptune is far from the sun so it's very cold)



2nd Read

Sleepy Solar System



During Continued

3. **Draw Attention to Key Events and Vocabulary**- Pause to highlight vocabulary and key concepts.

Key content: There are eight planets in our solar system. Each planet is unique.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
Earth	the planet where we live <i>Earth is the planet where we live. Use your hands to make a circle in front of you. This is Earth.</i>	hands form a small circle in front of the body
sun	the biggest star in our solar system, all the planets travel around the sun <i>The sun is the biggest star in our solar system. Use your hand to make a fist in front of you. Then open and close it to show how the sun shines.</i>	make a fist in front of you and open and close it with your palm facing out
asteroid	small rocks that orbit the sun, like the planets <i>The asteroids zoom across the sky. Make a fist with one hand and move it around in front of you in a shape like a rainbow.</i>	make a fist with one hand and move it around in front of you in an arcing motion

After

1. **Ask their opinion.**

Did you like this book? (thinking gesture - finger on forehead) *Show me a thumb if you liked this book.*

Tell me one thing you learned in this story. Start your sentence with "I learned..."

Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Discussion questions

What planets did we see in this book? (thinking gesture - finger on forehead)

If you have an idea to share, show a thumbs up.

Encourage all to think about their answer and call on 1-2 students who have their thumbs up.
(Response - various answers- Mercury, Venus, Earth, etc.)

Which planet is farthest from the sun? Its name starts with Nep-

(Thinking gesture and then hand open to note choral response- Neptune).

Provide the first sound in the word if you think they need a clue!



2nd Read

Sleepy Solar System



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>The planet we live on is called _____ (Earth). Ready to clap? Earth.</i>	hands form a small circle in front of the body
<i>The biggest star in our solar system that all the planets travel around is called the _____ (sun). Let's clap it. Sun.</i>	make a fist in front of you and open and close it with your palm facing out
<i>Small rocks that orbit the sun like the planets do are called _____ (asteroids). As-ter-oids. Asteroids.</i>	make a fist with one hand and move it around in front of you in an arcing motion

3. Follow-Up Activity: Craft - Solar System Book (print one for each student from the website)

Remember, these groups should be heterogeneous so students can learn oral language skills from each other. After reading the story again, introduce the craft. Explain that everyone will be making a book about the solar system. Ask students to use their knowledge of the solar system to guess what might be in the book. Show students the booklets. Talk briefly about each page, asking the students what they remember about each celestial item. Students color and decorate their solar system book.

*These books can be placed into the Observatory for students to complete at another time.

Name _____



The Solar System



For the Teacher:

Preview

The Sun is Kind of a Big Deal



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 7: *The Sun is Kind of a Big Deal* by Nick Seluk

Materials Needed: None

Vocabulary

Word	Definition	Gesture
planet	a huge natural object that travels around a star, our planet is Earth	hand forms a small circle in front of the body
orbit	travel in a circle around something	hold one finger pointing up, and move it around in a circle
solar eclipse	when the moon's shadow covers the sun and makes it dark during the day	make two fists with your hands, start them apart and slowly bring them together so one is in front of the other

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky

(point up to sky)

The sun is in the sky

(point up to sky)

Hot and bright

it gives us light

(ASL sign for light)

The sun is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

Around and round

the Earth it goes

(make circle with hands)

The moon is in the sky

(point up to sky)

<https://www.tes.com/teaching-resource/space-song-book-301319>

ASL- light



1st Read

The Sun is Kind of a Big Deal



Before

1. **Topic Introduction-** *We have been learning about space. We know so many things about our solar system and the planets in it. How many planets are in our solar system?* (Thinking gesture and then hand open to note choral response- eight) *Eight! The planets all travel around the...* (Thinking gesture and then hand open to note choral response- sun) *SUN!*
2. **Book Introduction-** *Look at the sun! It's wearing sun glasses and walking on a red carpet. Red carpets are for very important people at very fancy events. I'm wondering if the sun is on a red carpet because it is important? The title of this book is The Sun is Kind of a Big Deal. If something is a big deal, it is very important. I know the sun is very important to our solar system. Everything travels around it!*
3. **Title and Author-** Draw attention to title and author. *The author of this book is Nick Seluk. He is also the illustrator. He wrote the words and drew the* (Thinking gesture and then hand open to note choral response- pictures) *pictures.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"Like, over a million times bigger!"	TA: <i>The sun is over a million times bigger than the Earth! That's amazing! I'm having a hard time imagining how big that is.</i>
"Do you know how many times you have been around the Sun?"	TA: <i>The Earth travels around the sun one time every year. That means your age also tells how many times you have traveled around the sun! How cool!</i>
"The Sun is always there, even when you can't see it."	TA: <i>The sun is always there, even at night and on cloudy days when we can't see it.</i>



1st Read

The Sun is Kind of a Big Deal



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: The sun is at the center of our solar system; all the planets travel around it. The sun is always there! We need the sun to give us light and heat.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
planet	a huge natural object that travels around a star, our planet is Earth <i>There are eight planets in our solar system. Make a small circle with your hands to show a planet.</i>	hand forms a small circle in front of the body
orbit	travel in a circle around something <i>All of the planets orbit the sun, like they are going around a racetrack. Hold one finger pointing up and move it around in a circle like an orbit.</i>	hold one finger pointing up, and move it around in a circle
solar eclipse	when the moon's shadow covers the sun and makes it dark during the day <i>When the moon gets in the sun's way we see a solar eclipse. Make two fists with your hands, start them apart and slowly bring them together so one is in front of the other.</i>	make two fists with your hands, start them apart and slowly bring them together so one is in front of the other



1st Read

The Sun is Kind of a Big Deal



After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like learning about the sun? Think about one thing that you learned.

(thinking gesture - finger on forehead)

Put your thumb up if you remember something you learned about the sun.

Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Check their understanding.

What is the center of our solar system?

(Thinking gesture and then hand open to note choral response- the sun)

Why is the sun kind of a big deal? What does the sun do that is so important?

(thinking gesture - finger on forehead).

Put your thumb up when you have an idea to share. (Call on 1-2 students with thumbs up to share responses- various answers- gives us light and heat, all the planets go around it, etc.)

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>planet</u> is a huge natural object that travels around a star. Our planet is Earth. Ready to clap? Plan-et, planet.</i>	hands form a small circle in front of the body
<i><u>Orbit</u> is to travel in a circle around something. Or-bit. Orbit.</i>	hold one finger pointing up, and move it around in a circle
<i>A <u>solar eclipse</u> is when the moon's shadow covers the sun and makes it dark during the day. So-lar e-clipse. Solar eclipse.</i>	make two fists with your hands, start them apart and slowly bring them together so one is in front of the other



1st Read

The Sun is Kind of a Big Deal



After Continued

Ask questions

Provide the first sound in the word if you think they need a clue!

What do we call it when the moon's shadow covers the sun and it is dark for a little bit on Earth during the day? We call it a solar _____ (eclipse). (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - eclipse)

Earth is our pl _____ (planet)? (thinking gesture - finger on forehead)

Provide the first sound in the word if you think they need a clue!

Everyone (hand open to note choral response - planet)

When the Earth moves around the sun like a racetrack it is or _____ (orbiting)?

(thinking gesture - finger on forehead)

Everyone (hand open to note choral response - orbiting)

3. **Follow Up Activity-** Game: Was it in the Book?

Explain, *We are going to play a game called Was it in the Book? I'm going to say a fact. You will show me a thumbs up if the fact was in the book and a thumbs down if it wasn't in the book.* Practice thumbs up and down.

- *Earth is the center of our solar system.* (thumbs down- no)
- *The sun is the center of our solar system.* (thumbs up- yes)



For the Teacher:
Preview
Birthday on Mars



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 8: *Birthday on Mars* by Sara Schonfeld

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
planet	a huge natural object that travels around a star, our planet is Earth	hand forms a small circle in front of the body
lonely	feeling sad to be all by yourself	close eyes and make a frowny face
curious	wanting to learn or know something	use pointer finger and tap raised chin (as if saying hmmm) as if thinking

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky
 (point up to sky)

The sun is in the sky
 (point up to sky)

Hot and bright
it gives us light
 (ASL sign for light)

The sun is in the sky
 (point up to sky)

The moon is in the sky
 (point up to sky)

The moon is in the sky
 (point up to sky)

Around and round
the Earth it goes
 (make circle with hands)

The moon is in the sky
 (point up to sky)

<https://www.tes.com/teaching-resource/space-song-book-301319>
 ASL- light



1st Read

Birthday on Mars

Before

1. **Topic Introduction-** *We have been learning all about space. There's a name for the study of space. What is that word?* (thinking gesture - finger on forehead) *Tell someone near you. Let's all say it together 1, 2, 3. Astronomy! Let's clap that word. As-tron-o-my.*
2. **Book Introduction-** *This picture is so interesting. This looks like a little robot. It's holding a birthday hat. Everything I see in this picture is red and orange. I wonder what this book is going to be about.*
3. **Title and Author-** Draw attention to title and author *This book is called Birthday on Mars! Oh! This must be the planet Mars. The person who wrote the words is Sara Schonfeld. What do we call the person who writes the words?* (Thinking gesture and then hand open to note choral response- author) *The author! That's right!*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"My friends from Earth sent me here to explore the entire planet."	TA: <i>I wonder why people want to explore Mars.</i> Q: <i>What are they hoping to find?</i>
"It's my birthday!"	TA: <i>How exciting! It's Curiosity's birthday. I wonder if it will celebrate its birthday.</i>
"Oops- I made a dust cloud!"	TA: <i>Mars is a dusty planet. Curiosity probably makes dust clouds a lot!</i>



1st Read

Birthday on Mars

3. Draw Attention to Key Events and Vocabulary- Pause to highlight vocabulary and key concepts.

Key content: Curiosity is a rover that was sent to Mars to explore. No people have ever visited Mars, even though it is our closest planet neighbor.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
planet	a huge natural object that travels around a star, our planet is Earth <i>People on Earth sent Curiosity to another planet, Mars. Use your hands to make a circle to show a planet.</i>	hand forms a small circle in front of the body
lonely	feeling sad to be all by yourself <i>Curiosity isn't lonely because it talks to people on Earth every day. Close your eyes and make a sad, frowny face to show lonely.</i>	close eyes and make a frowny face
curious	wanting to learn or know something <i>We should all be curious about new things. Point your chin up a bit and use your pointer finger and tap your chin like you are thinking.</i>	use pointer finger and tap raised chin (as if saying hmmm) as if thinking

After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

I enjoyed the story about Curiosity. I think it is so interesting that a robot is helping curious people to learn more about a planet that people have never traveled to.

Did you like reading this book? (thinking gesture - finger on forehead)

Put your thumb up if you enjoyed reading this book.

Check their understanding.

Who was this book about? It was about the Mars ____ (rover)

(Thinking gesture and then hand open choral response- rover)

Where did the story take place?

(Thinking gesture and then hand open to note choral response- Mars)



1st Read

Birthday on Mars

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>planet</u> is a huge natural object that travels around a star. Our planet is Earth. This book was about Mars. Ready to clap? Plan-et, planet.</i>	hands form a small circle in front of the body
<i><u>Lonely</u> is when you are feeling sad to be all by yourself. Lone-ly. Lonely.</i>	close eyes and make a frowny face
<i><u>Curious</u> is when you are wanting to learn or know something. Cur-i-ous. Curious.</i>	use pointer finger and tap raised chin (as if saying hmmm) as if thinking

Ask questions (thinking gesture) with choral responding (open hand gesture).

When we feel sad because we are all by ourself we might feel _____?

Everyone (lonely)

What planet was this book about?

Everyone (Mars)

3. Follow Up Activity- Vocabulary Review

Explain, *One word we learned was curious. Curious means wanting to learn or know something. We can all be curious about new things. For example, I am curious about... I want to know more about... because...* (Share something you are curious about.)

I'm wondering what you are curious about. (thinking gesture - finger on forehead) *Think about what you are curious about, what you want to learn more about.* (Pause briefly for discussion or facilitation of conversation.) *Put your thumb up when you thought of something you are curious about.*

Call on 1-2 students who have their thumb up. Ask them to *start your sentence with, "I am curious about..."*



2nd Read

Birthday on Mars



Unit 4: Astronomy, Part 1 - The Universe is BIG & Planets

Book 8: *Birthday on Mars* by Sara Schonfeld

Re-Read & Activity: Craft - marble painting tracks of the rover.

Materials Needed: Orange paper, red paint, marble, tray with edges or cardboard box, rover cutout, glue stick

Before

1. **Ask if they can remember what this book is about-** show them the cover to remind them.
We have already read this story. Do you remember it? Look at the cover. What is this little robot?
 (Thinking gesture and then hand open to note choral response- curiosity) *Curiosity! Where is Curiosity?*
 (Thinking gesture and then hand open to note choral response- on Mars) *On Mars!*
2. **Point out title & author-** ask if anyone can tell you what the author does.
The title of this story is Birthday on Mars!. The author of the story is Sara Schonfeld. Who remembers what the author does? Tell me! (Thinking gesture and then hand open to note choral response- writes the words) *Yes, the author writes the words. The illustrator is Andrew J. Ross. He made the pictures.*
3. **Tell them this time we are going to read and discuss the story** so be ready to share your ideas!
We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

1. **Read** with excitement and fluency.
2. **Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"...and I live on Mars."	Q: <i>Where is Curiosity?</i> (on Mars)
"No humans have ever been here before."	Q: <i>Do people live on Mars?</i>
"We should all be curious- about everything!"	Q: <i>Curiosity is lifting up a rock to see what's underneath. Have you ever done that? What did you see under the rock?</i>
"Especially today. Because today is extra-special."	Q: <i>Where is Mars in this picture? Where is Earth? Do you see how far away these planets are?</i>



2nd Read

Birthday on Mars



3. Draw Attention to Key Events and Vocabulary- Pause to highlight vocabulary and key concepts.

Key content: Curiosity is a rover that was sent to Mars to explore. No people have ever visited Mars, even though it is our closest planet neighbor.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
planet	a huge natural object that travels around a star, our planet is Earth <i>People on Earth sent Curiosity to another planet, Mars. Put both of your hands out in front of you to make a circle in front of your body to show a planet.</i>	hand forms a small circle in front of the body
lonely	feeling sad to be all by yourself <i>Curiosity isn't lonely because it talks to people on Earth every day. Close your eyes and make a sad, frowny face to show lonely.</i>	close eyes and make a frowny face
curious	wanting to learn or know something <i>We should all be curious about new things. Point your chin up a bit and use your pointer finger and tap your chin like you are thinking.</i>	use pointer finger and tap raised chin (as if saying hmmm) as if thinking

After

1. Ask their opinion.

Did you like this book? (thinking gesture - finger on forehead) *Show me a thumb if you liked this book.*

Tell me your favorite part. Start your sentence with "My favorite part was..."

Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Discussion questions

Who was this book about? (Thinking gesture and then hand open to note choral response- Curiosity)

Where did this story take place? (Thinking gesture and then hand open to note choral response- Mars)



2nd Read

Birthday on Mars



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A huge natural object that travels around a star is called a _____ (planet). Plan-et. Planet.</i>	hand forms a small circle in front of the body
<i>When you are feeling sad because you are all by yourself you might be feeling _____ (lonely). Lone-ly. Lonely.</i>	close eyes and make a frowny face
<i>When you want to learn or know about something you are _____ (curious). Cur-i-ous. Curious.</i>	use pointer finger and tap raised chin (as if saying hmmm) as if thinking

3. Follow-Up Activity: Craft - marble painting tracks of the rover.

After reading the story again, introduce the craft. Explain that you will be making a scene from the book. Remind students that Mars is the color of rust and it's very dusty. Give students an orange piece of paper on an edged tray or in a cardboard box. Put a line of red paint on the bottom of the paper. Drop a marble onto the paper. Encourage students to gently roll the marble around by tilting the tray. The red lines represent Curiosity's tracks. Allow the paint to dry before gluing Curiosity onto the scene.





Shared Writing

Birthday on Mars



Planning Guide - Express Ideas

Topic Sentence: Write the topic sentence on the board, leaving a blank space for the underlined word:

We are all curious about new things.

Plan your detail and concluding sentences (You can utilize the following.)

Detail: *We are curious about outer space.*

Detail: *We are curious about astronauts.*

Detail: *We are curious about the planets.*

Conclusion: *It is fun to be curious.*

Vocabulary to Include if Possible

Word	Definition	Gesture
planet	a huge natural object that travels around a star, our planet is Earth	hand forms a small circle in front of the body
lonely	feeling sad to be all by yourself	close eyes and make a frowny face
curious	wanting to learn or know something	use pointer finger and tap raised chin (as if saying hmmm) as if thinking

Let's Write!

Discuss the book and vocabulary: *We read this book called Birthday on Mars. Do you remember that the rover named Curiosity celebrated its birthday on the planet Mars? Mars is our closest planet neighbor but it's still too far away for people to visit. This little robot investigated the planet for us.* (thinking gesture - finger on forehead) *Do you remember what curious means?* Encourage all to think about their answer and call on 1 student who has their thumbs up to share a response- wanting to learn or know something) *Curious means wanting to learn or know something. We are all curious about new things. Let's write to tell what we are curious about.*

Write Topic Sentence

- Plan:** *Let's work together to complete this sentence. It says, "We are all blank about new things? What word could we put there? What's the word for wanting to learn or know something?"* (thinking gesture - finger on forehead and then hand open to note choral response - curious)
- Write:** Write words to complete the sentence.
- Read aloud, pointing to each word:** *We are all curious about new things.*



Shared Writing

Birthday on Mars



Write Detail Sentence(s)

1. **Plan:** *What are some things we are curious about? Is there anything we have been learning about that you want to know more about?* Guide children by showing them a few pictures in recently read books, if necessary. Remember the planned detail sentences are available if your students need more direction. Otherwise, write the ideas they share.
2. **Write:** *We are curious about outer space.*
3. **Read** aloud, pointing to each word: *We are curious about space.* Read again, encouraging children to read with you.

Continue adding detail sentences if students are engaged. This can also be returned to tomorrow or added to later in the day.

Write Concluding Sentence

1. **Plan:** *We are curious about so many things!. Now, how do we tell our readers that we are done? Maybe we could say that it is fun to be curious.*
2. **Write:** *It is fun to be curious.*
3. **Read** aloud, pointing to each word: *It is fun to be curious.* Read again, encouraging children to read with you

Read the whole paragraph with students. Post writing where they can see it.



For the Teacher:

Preview

Kitten's First Full Moon



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 9: *Kitten's First Full Moon* by Kevin Henkes

Materials Needed: None

Vocabulary

Word	Definition	Gesture
kitten	a baby cat	thumb and pointer finger on both hands and draw away from mouth like whiskers
full moon	when we can see the whole moon, it is big and round	use both hands to make a circle with your fingers and hold it high above your head
leaped	jump far	use hand to make a hopping motion, leaping through the air

Language Time

Tuning up for Outer Space (to the tune of Farmer in the Dell)

The sun is in the sky

(point up to sky)

The sun is in the sky

(point up to sky)

Hot and bright

it gives us light

(ASL sign for light)

The sun is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

The moon is in the sky

(point up to sky)

Around and round

the Earth it goes

(make circle with hands)

The moon is in the sky

(point up to sky)

<https://www.tes.com/teaching-resource/space-song-book-301319>

ASL- light



1st Read TITLE

Before

1. **Topic Introduction-** *We have been learning about astronomy, the study of space. We learned about the universe and planets. Today we are going to start learning about something else that is in space.*
2. **Book Introduction-** *Look at this cute cat! I see a great, big circle behind the cat. I wonder what that is. This book is called Kitten's First Full Moon. Is it the moon?*
3. **Title and Author-** Draw attention to title and author. *This book is written and illustrated by Kevin Henkes. That means he wrote the words and he ____.* (Thinking gesture and then hand open to note choral response- drew the pictures).

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"...and opened her mouth and licked."	Q: <i>Oh no! Is Kitten going to be able to reach the full moon with her tongue? What is Kitten going to reach with her tongue? Ew!</i>
"But Kitten never seemed to get closer. Poor Kitten."	TA: <i>The moon is so far away. Kitten can't run to the moon. I wonder if Kitten will keep trying.</i>
"Kitten saw another bowl of milk."	TA: <i>This is a reflection of the moon. It's not really the moon. I don't think Kitten knows that.</i> Q: <i>What is she going to do?</i>
"She leaped with all her might-"	TA: <i>Oh no! I think Kitten is going to jump into the pond and get wet. I don't think she's going to like that.</i>
"just waiting for her."	TA: <i>Kitten tried so hard to get the moon because she thought it was a bowl of milk. She never reached the moon, but she did get a bowl of milk!</i>



1st Read TITLE

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: The full moon is big and round. The moon is far away from Earth. We can't reach it when we are on Earth.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
kitten	a baby cat <i>The kitten has never seen a full moon before. Put your fingers together by your mouth and pull them away to show whiskers.</i>	thumb and pointer finger on both hands and draw away from mouth like whiskers
full moon	when we can see the whole moon, it is big and round <i>Kitten thinks the full moon is a bowl of milk. Use both hands to make a circle with your fingers and hold it high above your head like a full moon.</i>	use both hands to make a circle with your fingers and hold it high above your head
leaped	jump far <i>Kitten thought she was leaping into a giant bowl of milk but it was actually a pond. Use your hand to make a hopping motion, leaping through the air.</i>	Use hand to make a hopping motion, leaping through the air

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

*Did you enjoy reading about Kitten trying to get to the moon? I felt a little bit sad for Kitten because she tried so hard and couldn't get to the moon. (thinking gesture - finger on forehead)
Put your thumb up if you feel sad for Kitten too.*

Check their understanding.

*Who was this story about? (Thinking gesture and then hand open to note choral response- kitten)
Why did kitten think the full moon was a bowl of milk? (thinking gesture - finger on forehead).
Put your thumb up when you have an idea to share.
(Call on 1-2 students with thumbs up to share responses- it is big & round)*



1st Read

Kitten's First Moon

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>kitten</u> is a baby cat. Ready to clap? Kit-ten, Kitten.</i>	thumb and pointer finger on both hands and draw away from mouth like whiskers
<i>A <u>full moon</u> is when we can see the whole moon. It is big and round. Full moon.</i>	use both hands to make a circle with your fingers and hold it high above your head
<i><u>Leaped</u> means to jump far. Leaped</i>	Use hand to make a hopping motion, leaping through the air

Ask questions (thinking gesture) with choral responding (open hand gesture).

Provide the first sound in the word if you think they need a clue!

What do we call when the moon's shadow covers the sun and it is dark for a little bit on Earth during the day? We call it a solar ____ (eclipse). Everyone (hand open to note choral response)

Earth is our pl ____ (planet)? (thinking gesture - finger on forehead) *Everyone* (hand open)

When the Earth moves around the sun like a racetrack it is or ____ (orbiting)? Everyone (hand open)

If you need to get over a puddle, what might you do? L ____ (leap). Everyone (hand open)

When we can see the whole moon we call it a f ____ (full moon)? Everyone (hand open)

A baby cat is called a k ____ (kitten)? Everyone (hand open to note choral response)

3. Follow Up Activity- Story Retell

Explain, *We are going to tell the story again. I want you to help me.* Show pictures in book to help children remember if necessary.

Kitten looked up at the sky and saw a full ____ (moon). She looked at the moon and thought that it was a bowl of ____ (milk). She wanted to drink the milk, so tried different ways to reach it. She jumped off her steps, climbed a tree, and tried to get the moon's reflection in a pond. Nothing worked. When she went home, she found something waiting on her porch. It was a bowl of ____ (milk).



2nd Read

Kitten's First Full Moon



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 9: *Kitten's First Full Moon* by Kevin Henkes

Re-Read & Activity: Craft - Earth and Moon painting

Materials Needed: Earth and moon template on tagboard, paint (green, blue, gray, black), paintbrush, Q-tip, yellow star cutouts, gluestick

Before

1. **Ask if they can remember what this book is about-** show them the cover to remind them.

We have already read this story. Do you remember it? Look at the cover. What is the big, round circle behind the kitten? (Thinking gesture and then hand open to note choral response- the full moon) *The full moon! What does Kitten think the moon is?* (Thinking gesture and then hand open to note choral response- a bowl of milk) *A bowl of milk.*

2. **Point out title & author-** ask if anyone can tell you what the author does.

The title of this story is Kitten's First Full Moon. The author of the story is Kevin Henkes. Who remembers what the author does? Tell me! (Thinking gesture and then hand open to note choral response- writes the words) *Yes, the author writes the words. The illustrator is also Kevin Henkes. He made the pictures and wrote the words.*

3. **Tell them this time we are going to read and discuss the story** so be ready to share your ideas!

We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

1. **Read** with excitement and fluency.
2. **Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"It was Kitten's first full moon."	Q: <i>What is a full moon?</i> (When we can see the whole moon and it looks big and round.)
"And opened her mouth and licked"	Q: <i>Can Kitten lick the moon?</i> (no) <i>What did she lick?</i> (a bug)
"She leaped with all her might-."	Q: <i>Oh no! What is going to happen to Kitten?</i> (She's going to get all wet)
"So she went back home-"	Q: <i>What is Kitten going to find on her porch?</i> (a bowl of milk)



2nd Read

Kitten's First Full Moon



During Continued

3. **Draw Attention to Key Events and Vocabulary**- Pause to highlight vocabulary and key concepts.

Key content: The full moon is big and round. The moon is far away from Earth. We can't reach it when we are on Earth.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
kitten	a baby cat <i>The kitten has never seen a full moon before. Put your fingers together by your mouth and pull them away to show whiskers.</i>	thumb and pointer finger on both hands and draw away from mouth like whiskers
full moon	when we can see the whole moon, it is big and round <i>Kitten thinks the full moon is a bowl of milk. Use both hands to make a circle with your fingers and hold it high above your head like a full moon.</i>	use both hands to make a circle with your fingers and hold it high above your head
leaped	jump far <i>Kitten thought she was leaping into a giant bowl of milk but it was actually a pond. Use your hand to make a hopping motion, leaping through the air.</i>	use hand to make a hopping motion, leaping through the air

After

1. **Ask their opinion.**

Did you like this book? (thinking gesture - finger on forehead) *Show me a thumb if you liked this book.*

Tell me one thing you learned in this story. Start your sentence with "I learned..."

Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Discussion questions

Who was this book about? (Thinking gesture and then hand open to note choral response- kitten)

What did Kitten try to reach?

(Thinking gesture and then hand open to note choral response- the full moon)



2nd Read

Kitten's First Full Moon



After Continued

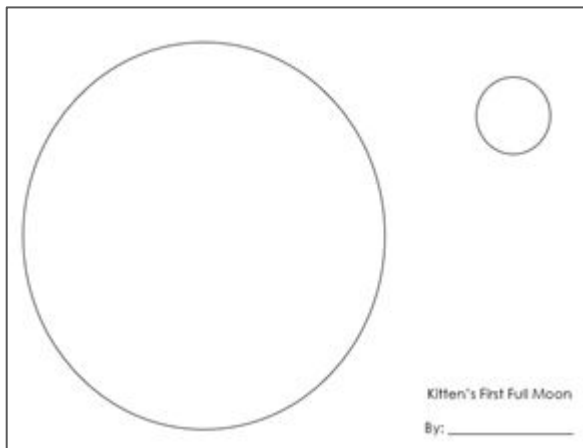
2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A baby cat is called a _____ (kitten).</i>	thumb and pointer finger on both hands and draw away from mouth like whiskers
<i>When we can see the whole moon and it is big and round it is called a _____ (full moon).</i>	use both hands to make a circle with your fingers and hold it high above your head
<i>When you jump far you _____ (leap).</i>	Use hand to make a hopping motion, leaping through the air

3. Follow-Up Activity: Craft - Earth and Moon painting

After reading the story again, introduce the craft. Remind students that Kitten couldn't reach the moon because it is far from Earth. Briefly explain that the moon seems to change shape as it travels around in space. Explain that students are going to be making a picture of the Earth and moon in space. Show students the template and ask which circle represents Earth and which represents that moon. With the paintbrush, students paint the Earth green and blue. With a Q-tip (to represent the moon's craters), students paint the moon gray. Students paint the background black. Once all paint is dry, students glue star cutouts to complete the picture.





For the Teacher:
Preview
Ten Twinkly Stars



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 10: *Ten Twinkly Stars* by Tiger Tales & Russell Julian

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
star	a glowing light in the sky, the sun is our biggest star	make a fist in front of you and open and close it with your palm facing out
gleam	shine, glitter	hold both hands palms away from you and wiggle your fingers
snooze	sleep	hands on top of each other on left ear and head to side as if sleeping

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read Ten Twinkly Stars



Before

1. **Topic Introduction-** *We have been reading books about space. Yesterday we read about something in space that we can see at night. The moon! Today we are going to read about something else we can see at night from space.*
2. **Book Introduction-** *This book is called Ten Twinkly Stars. Have you ever seen the stars twinkle at night? This is a counting book. What do you think we are going to count in this book? Stars!*
3. **Title and Author-** Draw attention to title and author. *The author of this book is Tiger Tales.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"High above the sleepy jungle"	TA: <i>It's time for bed. I think it's night time in the jungle.</i>
"They play the whole night through"	TA: <i>Owls don't sleep at night. They stay awake. Owls sleep during the day. Q: Did you know that?</i>
"And snooze upon the sand"	TA: <i>Camels live in the hot, dry desert. There's a lot of sand.</i>

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.
Key content: Stars twinkle in the night sky. Most animals sleep at night.
Vocabulary: briefly define/highlight vocab words when they come up in the story.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
star	a glowing light in the sky, the sun is our biggest star <i>We see lots of stars at night. Use your hand to make a first in front of you. Then open and close it to show a star.</i>	make a fist in front of you and open and close it with your palm facing out
gleam	shine, glitter <i>The stars twinkle and glitter. Hold your hands up with your palms facing away from you. Wiggle your fingers to show gleam.</i>	hold both hands palms away from you and wiggle your fingers
snooze	sleep <i>Most people and animals snooze at night. Put your hands together and rest your cheek on them, like you are sleeping.</i>	hands on top of each other on left ear and head to side as if sleeping



1st Read

Ten Twinkly Stars



After

1. Ask Questions

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

I enjoyed counting the twinkly stars. Thumbs up if you liked that, too.

(thinking gesture - finger on forehead)

Now turn to your partner and say "I liked counting the stars" or "I didn't like counting the stars."

Check their understanding.

What did we count in this book?

(Thinking gesture and then hand open to note choral response- stars)

What animals did we see in this book? (thinking gesture - finger on forehead)

If you have an idea to share, show a thumbs up.

Encourage all to think about their answer and call on 1-2 students who have their thumbs up.

(Response - various answers- lion, owls, camel)

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>star</u> is a glowing light in the sky, the sun is our biggest star. Ready to clap? Star.</i>	make a fist in front of you and open and close it with your palm facing out
<i><u>Gleam</u> means to shine or glitter. Gleam.</i>	hold both hands palms away from you and wiggle your fingers
<i><u>Snooze</u> means to sleep. Snooze.</i>	hands on top of each other on left ear and head to side as if sleeping



1st Read

Ten Twinkly Stars



After Continued

Ask questions (thinking gesture) with choral responding (open hand gesture).

Do we snooze at nighttime?

Everyone (yes)

Do owls snooze at nighttime?

Everyone (no)

Do stars gleam?

Everyone (yes)

Does dirt gleam?

Everyone (no)

3. **Follow Up Activity-** Math Word Problem

Explain, *We counted twinkly stars in that book. Four bright stars shimmered on ice. (hold up 4 fingers) and one star shined through the night outside the bears' cozy cave (hold up 1 finger). How many stars is that in all? (Wiggle fingers as you count.) 1,2,3,4,5. Four plus one equals five. Say that with me and show me your fingers. Four plus one equals five. Thank you for helping me with that addition problem.*



For the Teacher:

Preview

City Moon

Unit 4: Astronomy, Part 2 - Moon & Stars

Book 11: *City Moon* by Rachel Cole & Blanca Gomez

Materials Needed: None

Vocabulary

Word	Definition	Gesture
full moon	when we can see the whole moon, it is big and round	use both hands to make a circle with your fingers and hold it high above your head
crane	stretch so you can see better	lift your head up and look around to try to see better
reflection	when light bounces off a shiny surface so you can see two of something	hold hands together and open them up, look at hands like looking at your reflection

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read City Moon

Before

1. **Topic Introduction-** *We have been learning about space. The study of outer space is Astronomy. Let's clap that. As-tron-o-my. We learned about planets and the universe. Now we are reading about things in space that we can see at night. We are reading about the moon and stars.*
2. **Book Introduction-** *This picture makes me feel peaceful and calm. I see two people walking in a city and I notice something big and round. I think it might be the moon. Do you think it is the moon?*
3. **Title and Author-** Draw attention to title and author. *The title of this book is City Moon and the author is Rachael Cole, she wrote the words. The illustrator is Blanca Gomez. Who remembers what the illustrator does? Tell me.* (Thinking gesture and then hand open to note choral response- draws the pictures) *Yes, the illustrator draws the pictures.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"Where is it?"	TA: <i>They can't see the moon. It's hiding. I wonder what it is hiding behind. Maybe this cloud?</i>
"Mama, are those other moons?"	TA: <i>Our planet, Earth, only has one moon. I think those glittery dots are stars.</i>
"Is that the moon in the puddle?"	TA: <i>This reminds me of another book.</i> Q: <i>Do you remember when Kitten saw a reflection of the full moon in the pond?</i>



1st Read City Moon

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: You can see the moon when it is dark. Earth only has one moon.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
full moon	when we can see the whole moon, it is big and round <i>The moon is full in this story. Use both of your hands to make a circle with your fingers and hold it high above your head to show the moon.</i>	use both hands to make a circle with your fingers and hold it high above your head
crane	stretch so you can see better <i>They are stretching their necks up to the sky. Lift your head up and look around to try to see better.</i>	lift your head up and look around to try to see better
reflection	when light bounces off a shiny surface so you can see two of something <i>The boy sees the moon's reflection in the water. Hold your hands together and open them up like a mirror. Pretend like you can see yourself in the mirror.</i>	hold hands together and open them up, look at hands like looking at your reflection

After

1. Ask Questions

Now I am going to ask you a few questions about our story. Remember, when I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like this story? (thinking gesture - finger on forehead as you ask the question)

Thumbs up if you liked it or thumbs down if you did not like it.

Check their understanding.

Who was this story about?

(Thinking gesture and then hand open to note choral response- a boy and his mom)

Where did this story happen?

(Thinking gesture and then hand open to note choral response- in the city)



1st Read City Moon

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words

Review each word stating the definition and making the gesture.

Encourage students to say the word and use the gesture

Word Definition to use	Gesture
<i>A <u>full moon</u> is when we can see the whole moon. It is big and round. Ready to clap? Full moon.</i>	use both hands to make a circle with your fingers and hold it high above your head
<i><u>Crane</u> is when you stretch so you can see better. Crane.</i>	lift your head up and look around to try to see better
<i><u>Reflection</u> is when light bounces off a shiny surface so you can see two of something. Re-flec-tion. Reflection.</i>	hold hands together and open them up, look at hands like looking at your reflection

Ask questions (thinking gesture) with choral responding (open hand gesture).

Can we see our reflection in a mirror?

Everyone (yes)

Can we see our reflection in a pond?

Everyone (yes)

Can we see our reflection in a piece of paper?

Everyone (no)

Can we see our reflection in a puddle?

Everyone (yes)

3. Follow Up Activity- Story Retell

Explain, *We are going to tell the story again. I want you to help me.* Show pictures in book to help children remember if necessary.

A boy and his mother went on a walk to look for the _____ (moon.) At first, they couldn't find the moon because it was _____ (hiding.) Then they found the moon in the sky. The moon was big and round. It was a full moon. While they waited to cross a street, they saw the moon's reflection in a _____ (puddle.) When the boy and his mom got tired, they went back home and the boy went to _____ (bed/sleep.)



For the Teacher:

Preview

Moon: A Peek-Through Picture Book



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 12: *Moon: A Peek-Through Picture Book* by Britta Teckentrup

Materials Needed: None

Vocabulary

Word	Definition	Gesture
shimmering	shining or glowing softly	hold hands out with palms facing down, wiggle fingers slowly
guide	show the way	place hand with palm up in front of you and gesture outward (as if saying you go first)
commands	controls	point sharply in front of you and slightly down

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read

Moon: A Peek-Through Picture Book



Before

1. **Topic Introduction-** *We have been learning about things that are in space that we can see at night. Do you remember what those things are? The moon and stars!*
2. **Book Introduction-** *I think this book might be about the forest and animals that live there. I see tall trees and animals. I also see a bright light. It's not round, but I think this light might be the _____ (moon).*
3. **Title and Author-** Draw attention to title and author. *The title of this book is Moon. The author and illustrator is Britta Teckentrup. That means she drew the pictures and...* (Thinking gesture and then hand open to note choral response- draws the pictures) *Wrote the words, that's right!*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"Have you ever wondered why the moon shines in the nighttime sky?"	TA: <i>I have wondered that! I am very curious about the moon. I want to learn more about it.</i>
"Tree frogs croak their nightly tune."	TA: <i>I just noticed something about the moon. It is getting bigger. That happens with the real moon. It changes shape!</i>
"Snowflakes fall on frozen ground."	TA: <i>You can see the moon everywhere on Earth.</i>



1st Read

Moon: A Peek-Through Picture Book



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: The moon changes shape over time. The moon affects the Earth in many ways. Its light helps guide creatures and it commands the ocean, too.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
shimmering	shining or glowing softly <i>The northern lights shimmer above the snow. Hold your hands out with your palms facing down, then wiggle your fingers slowly to show shimmering.</i>	hold hands out with palms facing down, wiggle fingers slowly
guide	show the way <i>As birds fly to a warmer place, the moon shows them the way. Put one hand out in front of you and move it out a bit, like you are saying "you go first."</i>	place hand with palm up in front of you and gesture outward (as if saying you go first)
commands	controls <i>The moon makes the ocean water get higher or lower. Point your finger like you are giving a command.</i>	point sharply in front of you and slightly down

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

*I liked this book. Show me a thumbs up if you like the story. (thinking gesture - finger on forehead)
Show me a thumbs up if you liked seeing the moon change shape.*

Check their understanding.

What was this book about? (Thinking gesture and then hand open to note choral response- the moon)

What animals did we see in the story? (thinking gesture - finger on forehead)

If you have an idea to share, show a thumbs up.

Encourage all to think about their answer and call on 1-2 students who have their thumbs up.
(Response - various answers- turtles, penguins, etc.)



1st Read

Moon: A Peek-Through Picture Book



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i><u>Shimmering</u> means shining or glowing softly. Ready to clap? Shim-mer-ing, shimmering.</i>	hold hands out with palms facing down, wiggle fingers slowly
<i><u>Guide</u> means to show the way. Guide.</i>	place hand with palm up in front of you and gesture outward (as if saying you go first)
<i><u>Commands</u> means controls. Com-mands. Commands.</i>	point sharply in front of you and slightly down

Ask questions (thinking gesture) with choral responding (open hand gesture).

Does the moon control the ocean? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - yes)

Does the moon guide birds where to fly? (thinking gesture - finger on forehead)

Everyone (hand open to note choral response - yes)

3. Follow Up Activity- Rhyming Practice

Explain, *There were lots of rhyming words in this book. Remember, rhyming words sound the same at the end. Let's go back and read parts of the book.* Reread the passages. Emphasize the words in bold. Ask, *Do those words rhyme? Do they sound the same at the end?* Read the whole passage, emphasizing the words in bold.

- *A scorpion scuttles through the **night**, Glowing with an eerie **light**.*
(Thinking gesture and then hand open to note choral response- yes)
- *In the jungle, through the **green**, Shafts of silvery light are **seen**.*
(Thinking gesture and then hand open to note choral response- yes)
- *Nature reveals a magical **sight**. Hundreds of turtles swim to **land**.*
(Thinking gesture and then hand open to note choral response- no)
- *As wispy clouds scutter **by**, A shining moonbow lights the **sky**...*
(Thinking gesture and then hand open to note choral response- yes)



Shared Writing

Moon: A Peek-Through Picture Book



Planning Guide - Express Ideas

Topic Sentence: Write the topic sentence on the board, leaving a blank space for the underlined word:

What does the moon do?

Plan your detail and concluding sentences (You can utilize the following.)

Detail: The moon shimmers at night.

Detail: The moon changes shape.

Detail: The moon guides the way for animals.

Conclusion: The moon is very important.

Vocabulary to Include if Possible

Word	Definition	Gesture
shimmering	shining or glowing softly	hold hands out with palms facing down, wiggle fingers slowly
guide	show the way	place hand with palm up in front of you and gesture outward (as if saying you go first)
commands	controls	point sharply in front of you and slightly down

Let's Write!

Discuss the book and vocabulary: Hold the book up. *We read this book called Moon. Do you remember how we saw the moon change shape? What else did we learn about the moon in this book?* (thinking gesture - finger on forehead) *If you have an idea to share, show a thumbs up.* Encourage all to think about their answer and call on 1-2 students who have their thumbs up to share responses)

Write Topic Sentence

- Plan:** Point to topic sentence written on the board and ask, *What word is missing in this sentence? What did we read about in this book?* (thinking gesture - finger on forehead and then hand open to note choral response - the moon) *We are going to work together to answer this question about the moon.*
- Write:** Write words to complete the sentence. Point out the question mark as you write it. Explain the function of the question mark. *This symbol means we are asking a question. A question needs an answer.*
- Read aloud, pointing to each word:** *What does the moon do?*



Shared Writing

Moon: A Peek-Through Picture Book



Write Detail Sentence(s)

1. **Plan:** *Let's answer that question. What did we learn from the book?* Guide children by showing them a few pictures in the book, if necessary. Remember the planned detail sentences are available if your students need more direction. Otherwise, write the ideas they share.
2. **Write:** *The moon shimmers at night.* (write the sentence they come up with—this is just an example)
3. **Read** aloud, pointing to each word: *The moon shimmers at night.* Read again, encouraging children to read with you.

Continue adding detail sentences if students are engaged. This can also be returned to tomorrow or added to later in the day.

Write Concluding Sentence

1. **Plan:** *We answered that question about the moon. Now, how do we tell our readers we are done?*
2. **Write:** *The moon is very important.*
3. **Read** aloud, pointing to each word: *The moon is very important.* Read again, encouraging children to read with you

Read the whole paragraph with students. Post writing where they can see it.



For the Teacher:
Preview
Moon's First Friends



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 13: *Moon's First Friends* by Susanna Leonard Hill

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
lonely	feeling sad to be all by yourself	close eyes and make a frowny face
astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
ventured	to go and explore somewhere new	hold one hand out flat with palm facing up, use other hand to have two fingers walk on palm

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read

Moon's First Friends



Before

1. **Topic Introduction-** *We have been learning about things in space that we can see at night, the moon and the stars. The study of space is called astronomy! What is the study of space called?*
2. **Book Introduction-** *What do you think this book might be about? (thinking gesture - finger on forehead) This looks like the moon and this looks like Earth. I'm wondering what this is. This story is called Moon's First Friends. I'm so curious. Who are Moon's first friends?*
3. **Title and Author-** Draw attention to title and author. *The author is Susanna Leonard Hill and Elisa Paganelli is the illustrator. Who remembers what the author does? They... (Thinking gesture and then hand open to note choral response- write the words) Yes! The author writes the words. And what does the illustrator do? (Thinking gesture and then hand open to note choral response- draws the pictures) The illustrator draws the pictures, very good!*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"The Moon saw glorious new creatures come and go."	TA: <i>The animals on Earth have changed through history. Some of the first animals are no longer here. There are no more saber-toothed tigers.</i>
"they came nowhere near high enough to reach the Moon"	TA: <i>A long time ago, people built tall pyramids, but they weren't tall enough to reach the moon.</i>
"She greeted the men who emerged from the ship."	TA: <i>Someone finally came to visit Moon. It was a person who arrived on a spaceship.</i>



1st Read

Moon's First Friends



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: The Earth has changed a lot over time and the moon has been with Earth through it all.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
lonely	feeling sad to be all by yourself <i>Moon wanted someone to visit her. Close your eyes and make a frowny face to show lonely.</i>	close eyes and make a frowny face
astronaut	a person who is trained to travel to outer space <i>Astronauts were the first to visit Moon! Hold your arms out by your side and pretend to be floating in space.</i>	hold arms out by your side and move around like floating in space
ventured	to go and explore somewhere new <i>Moon wondered why no one had ventured to visit her. Hold one hand out flat. Make your fingers on your other hand walk across your palm to show someone venturing.</i>	hold one hand out flat with palm facing up, use other hand to have two fingers walk on palm

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like that story? I thought it was fun to see how Earth changed over time. I was happy when Moon finally had a visitor. Thumbs up if that made you happy, too.

Check their understanding.

What was this story about? The ____ (moon). (Thinking gesture and then hand open)

What do we call people who are trained to travel in space? (astronauts)

(Thinking gesture and then hand open to note choral response- astronauts)



1st Read

Moon's First Friends



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i><u>Lonely</u> means feeling sad to be all by yourself. Ready to clap? Lone-ly, lonely.</i>	close eyes and make a frowny face
<i>An <u>astronaut</u> is a person who is trained to travel to outer space. As-tro-naut. Astronaut.</i>	hold arms out by your side and move around like floating in space
<i><u>Ventured</u> means to go and explore somewhere new. Ven-tured. Ventured.</i>	hold one hand out flat with palm facing up, use other hand to have two fingers walk on palm

Ask questions (thinking gesture) with choral responding (open hand gesture).

Lonely is what we feel when we are sad to be alone. Are you lonely when...

You are at a party with lots of people?

Everyone (no)

You are playing a game with your best friend?

Everyone (no)

You go somewhere fun with your family?

Everyone (no)

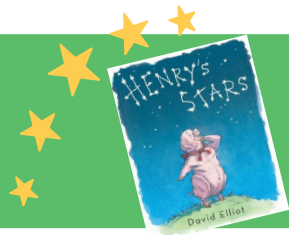
When no one wants to play with you?

Everyone (yes)

3. Follow Up Activity- Game: Was it in the Book?

Explain, *We are going to play a game called Was it in the Book? I'm going to say a fact. (thinking gesture) You will show me a thumbs up if the fact was in the book and a thumbs down if it wasn't in the book.* Practice thumbs up and down.

- *Sabre-tooth tigers visited the moon a long time ago.* (thumbs down- no)
- *People floated to the moon in a hot air balloon.* (thumbs down- no)
- *Astronauts were the first to visit the moon.* (thumbs down- yes)



For the Teacher:
Preview
Henry's Stars



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 14: *Henry's Stars* by David Elliot

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
constellation	a group of stars that look like something	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
clever	very smart	tap the side of your head, near your temple, with your index finger

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read Henry's Stars

Before

1. **Topic Introduction-** *We have been learning about things in space that we can see at night. Do you remember something that we see in the sky at night? (thinking gesture - finger on forehead). Put your thumb up when you have an answer.* Call on 2 children to answer.
2. **Book Introduction-** *I think this book might be about a pig who notices things in the night sky.*
3. **Title and Author-** Draw attention to title and author. *This book is called Henry's Stars. The author and illustrator is David Elliot. He wrote the words because he is the author. He is also the illustrator so that means he... (Thinking gesture and then hand open to note choral response- drew the pictures) Yes, the illustrator draws the pictures.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"It's a great big starry pig running across the sky!"	<p>TA: <i>Henry used his imagination to find a group of stars that look like a big pig.</i></p> <p>Q: <i>Have you ever noticed a group of stars that look like something?</i></p>
"You have found a Great Sheep."	<p>TA: <i>When the sheep looked at the group of stars, they didn't see a pig, they saw a sheep. Now I think those stars look like a sheep!</i></p>
"It's a Great Starry Horse."	<p>TA: <i>All the animals think the group of stars look just like them. Now I'm confused. I'm not sure what I think the group of stars looks like.</i></p>
"Henry couldn't wait to show the others."	<p>TA: <i>Uh oh! The other animals confused Henry before. I wonder if the same thing is going to happen again.</i></p>



1st Read

Henry's Stars

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Sometimes groups of stars look like something.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
constellation	a group of stars that look like something <i>The animals all saw something different in the constellations. Point your finger at the stars. Now move it around like you are tracing lines between stars.</i>	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
clever	very smart <i>The Sheep thought Henry was clever, smart, for finding a sheep in the sky. Tap your brain to show you are clever.</i>	tap the side of your head, near your temple, with your index finger

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

I enjoyed reading that story and imagining that the constellation, a group of stars, was different animals. Thumbs up if you liked that, too. (thinking gesture - finger on forehead).

What was your favorite constellation? (thinking gesture and encourage thumbs up).

Check their understanding.

What do we call a group of stars that look like something? Con- _____. (constellation)
(Thinking gesture and then hand open to note choral response)

What did Henry think the constellation looked like? A great ____ (Pig).
(Thinking gesture and then hand open to note choral response)



1st Read Henry's Stars

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words

Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture**

Word Definition to use	Gesture
<i>A <u>constellation</u> is a group of stars that look like something. Ready to clap? Con-stel-la-tion, constellation.</i>	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
<i><u>Clever</u> means very smart. Clev-er. Clever.</i>	tap the side of your head, near your temple, with your index finger

Ask questions (thinking gesture) with choral responding (open hand gesture).

If someone invents a new robot are they clever?

Everyone (yes)

If someone leaves all their toys on the floor are they clever?

Everyone (no)

If someone thinks of a way to fix something that is broken, are they clever?

Everyone (yes)

Is it clever to eat ice cream before dinner? (thinking gesture - finger on forehead) *Everyone* (hand open to note choral response - no)

3. Follow Up Activity- Story Retell

Explain, *We are going to tell the story again. I want you to help me.* Show pictures in book to help children remember if necessary.

Henry was staring up at the night sky. He looked at a group of stars and saw a _____ (pig.) Henry ran to show his friends. The sheep looked at the constellation and saw a _____ (sheep.) The chickens joined in and they thought the stars looked like _____ (heavenly hens/chickens.) Henry's mind was all a clutter. He couldn't see the Great Pig anymore. He went back home. When he looked up at the stars and saw the pig again he ran to tell his friends.



2nd Read Henry's Stars



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 14: *Henry's Stars* by David Elliot

Re-Read & Activity: Explore Constellations

Materials Needed: Constellation Cards

Before

1. **Ask if they can remember what this book is about-** show them the cover to remind them.
We have already read this story. Do you remember it? Look at the cover. What is Henry looking at? (Thinking gesture and then hand open to note choral response- stars) *Stars in the night sky!*
2. **Point out title & author-** ask if anyone can tell you what the author does.
The title of this story is Henry's Stars. The author of the story is David Elliot. Who remembers what the author does? Tell me! (Thinking gesture and then hand open to note choral response- write the words)
Yes, the author writes the words. The illustrator is also David Elliot. He also made the pictures.
3. **Tell them this time we are going to read and discuss the story** so be ready to share your ideas!
We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

1. **Read** with excitement and fluency.
2. **Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"It's a great big starry pig running across the sky!"	Q: <i>What do we call a group of stars that look like something?</i> (A constellation)
"Ah, yes! I see it! said Daisy."	Q: <i>What did the sheep think the constellation looked like?</i>
"Great Pig, actually, said Henry."	Q: <i>Do the animals agree on what the constellation looks like?</i>
"I'll settle this,' said Mr. Brown."	Q: <i>Did Mr. Brown settle the argument?</i>



2nd Read Henry's Stars



During Continued

3. **Draw Attention to Key Events and Vocabulary**- Pause to highlight vocabulary and key concepts.

Key content: Sometimes groups of stars look like something.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
constellation	a group of stars that look like something <i>The animals all saw something different in the constellation. Point your finger at the stars. Now move it around like you are tracing lines between stars.</i>	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
clever	very smart <i>The Sheep thought Henry was clever, smart for finding a sheep in the sky. Tap your brain to show you are clever.</i>	tap the side of your head, near your temple, with your index finger

After

1. **Ask their opinion.**

Did you like this book? (thinking gesture - finger on forehead)

Show me a thumb up if you liked this book.

Tell me one thing you learned in this story. Start your sentence with "I learned..."

Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Discussion questions

Provide the first sound in the word if you think they need a clue!

What were the animals looking at?

(Thinking gesture and then hand open to note choral response- a constellation, a group of stars.)

What were the animals arguing about?

(Thinking gesture and then hand open to note choral response- What animal the constellation looked like)



2nd Read Henry's Stars



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A group of stars that look like something is called a _____ (constellation). Con-stel-la-tion. Constellation.</i>	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
<i>When someone or something is very smart it is _____ (clever). Clev-er.</i>	tap the side of your head, near your temple, with your index finger

3. Follow-Up Activity: Constellation Activity

After reading the story again, introduce the activity. Explain that people also like to imagine that groups of stars look like things. We know that people have done this for a long time. There are some constellations that people imagined a long time ago. We can still find these constellations in our sky at night. Guide students in exploring the constellations, describing what they imagine in each constellation.



Ursa Major



Map of Ursa Major



For the Teacher:

Preview

Our Stars



Unit 4: Astronomy, Part 2 - Moon & Stars

Book 15: *Our Stars* by Anne Rockwell

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
constellation	a group of stars that look like something	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
orbit	travel in a circle around something	hold one finger pointing up, and move it around in a circle
twinkle	to shine with sparkling light	hold hands in front of you with fingers spread apart, wiggle fingers

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star

(open and close hands)

How I wonder what you are

(point to temple with pointer finger)

Up above the world so high

(point up)

Like a diamond in the sky

(make a diamond with fingers)

Twinkle, twinkle little star

(open and close hands)

How I wonder what you are

(point to temple with pointer finger)



1st Read Our Stars



Before

1. **Topic Introduction-** *We have been reading about things we can see in the night sky, stars and the moon. The moon and stars are in space. The study of space is called astronomy. We are learning about astronomy.*
2. **Book Introduction-** *Today we are going to read another book about stars. I see a child pointing at the stars. Do you think he is imagining shapes in the stars?*
3. **Title and Author-** Draw attention to title and author. *This book is called Our Stars. The author and illustrator is Anne Rockwell. That means that she drew the pictures and...* (Thinking gesture and then hand open to note choral response- wrote the words) *Yes, the author writes the words.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"All year long, the Big Dipper points toward a star named Polaris."	TA: <i>Some constellations, like Orion, are only seen at certain times. Some, like the Big Dipper, can be seen all year. I wonder why that is.</i>
"Sometimes before the stars come out, we can see a bright light..."	TA: <i>Cool! I'm going to look for Venus tonight before the stars come out. I wonder if I can find it.</i>
"Our moon seems to change its shape each night, but it doesn't."	TA: <i>We read a book where we watched the moon's shape change. It doesn't actually change shape. It just looks like it does. Interesting!</i>



1st Read Our Stars



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: The sun is a star. Planets orbit around stars.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
constellation	a group of stars that look like something <i>Constellations tell us many things. Point your finger at the stars. Now move it around like you are tracing lines between stars.</i>	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
orbit	travel in a circle around something <i>Our planet, Earth, orbits around the sun. Hold one finger pointing up and move it around in a circle, like an orbit.</i>	hold one finger pointing up, and move it around in a circle
twinkle	to shine with sparkling light <i>Stars twinkle in the night sky. Hold your hands in front of you with your fingers spread apart, wiggle your fingers to show them twinkling.</i>	hold hands in front of you with fingers spread apart, wiggle fingers

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like this book? (thinking gesture - finger on forehead)

Show me a thumb up if you liked this book. I learned a lot! Tell me one thing you learned in this story.

Start your sentence with "I learned..."

Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Check their understanding.

What does our planet, Earth, orbit?

(Thinking gesture and then hand open to note choral response- the sun)

When can you see Venus? (thinking gesture - finger on forehead)

If you have an idea to share, show a thumbs up. Encourage all to think about their answer and call on 1-2 students who have their thumbs up. (Response - sometimes in the evening, just before the stars come out)



1st Read Our Stars



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>constellation</u> is a group of stars that look like something. Ready to clap? Con-stel-la-tion, constellation.</i>	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
<i><u>Orbit</u> means to travel in a circle around something. Or-bit. Orbit.</i>	hold one finger pointing up, and move it around in a circle
<i><u>Twinkle</u> means to shine with sparkling light. Twin-kle. Twinkle.</i>	hold hands in front of you with fingers spread apart, wiggle fingers

Ask questions (thinking gesture) with choral responding (open hand gesture).

What do we call something that shines with sparkling light? (thinking gesture - finger on forehead)
Everyone (hand open to note choral response - twinkle)

When something travels in a circle around something it _____? (thinking gesture - finger on forehead)
Everyone (hand open to note choral response - orbits)

A group of stars that look like something are called _____? (thinking gesture - finger on forehead)
Everyone (hand open to note choral response - a constellation)

3. Follow Up Activity- Vocabulary Review

Explain, *We talked about some of the important words in this story. One word we learned was orbit. Orbit means to travel in a circle around something. Some things in space orbit and others don't. I'm going to say something and you will tell me what it orbits.*

- *Earth* (Thinking gesture and then hand open to note choral response- the sun)
- *Moon* (Thinking gesture and then hand open to note choral response- the Earth)
- *Mars* (Thinking gesture and then hand open to note choral response- the sun)



For the Teacher:

Preview

How to Catch a Star

Unit 4: Astronomy, Part 3 - Astronauts

Book 16: *How to Catch a Star* by Oliver Jeffers

Materials Needed: None

Vocabulary

Word	Definition	Gesture
star	a glowing light in the sky, the sun is our biggest star	hold one fist in front of you and open and close it with your palm facing out
sunrise	the time when the sun starts to come up in the morning	hold hands low and close together with palms facing down, raise hands slowly in an arc spreading them apart to show the sun coming up
appear	when something can be seen	hold hands in a fist in front of you and quickly open them up and spread your fingers

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read

How to Catch a Star

Before

1. **Topic Introduction-** *We have been reading about the moon and stars. We can see the moon and stars at night. They are in space. The study of space is called Astronomy. Turn to someone near you and say, "The study of space is called Astronomy."*
2. **Book Introduction-** *Today we are going to read our last book about stars. It is called How to Catch a Star.*
3. **Title and Author-** Draw attention to title and author. *This book is by Oliver Jeffers. He is the author and the illustrator. We read another book by Oliver Jeffers called Here We Are. Do you remember that book? Show me a thumbs up if you remember that book.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"The boy decided he would try to catch one."	TA: <i>This reminds me of the kitten who tried to get the moon. I don't think the boy is going to be able to get the star either.</i>
"If only he could fly up in a spaceship and just grab the star..."	TA: <i>I don't think that would work either. Stars are really big and hot. No one can grab a star.</i>
"it just rippled through his fingers"	TA: <i>I think I know what's happening. I think the star was just a reflection in the water.</i>
"Washed up on the bright golden sand."	TA: <i>I don't think that is a star from the sky. I think that's a sea star.</i>



For the Teacher:

Preview

Our Stars



Unit 4: Astronomy, Part 3 - Astronauts

Book 16: *Our Stars* by Anne Rockwell

Materials Needed: None

Vocabulary

Word	Definition	Gesture
constellation	a group of stars that look like something	point your finger up in the air and move it like you are connecting a pattern or tracing lines between stars
orbit	travel in a circle around something	hold one finger pointing up, and move it around in a circle
twinkle	to shine with sparkling light	hold hands in front of you with fingers spread apart, wiggle fingers

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read

How to Catch a Star

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: People can't catch stars, but it's fun to imagine.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
star	a glowing light in the sky, the sun is our biggest star <i>The boy loved stars very much. Use your hand to make a fist in front of you. Then open and close it with your palm facing out to show a star.</i>	make a fist in front of you and open and close it with your palm facing out
sunrise	the time when the sun starts to come up in the morning <i>The boy thought he could catch a star at sunrise. Put your hands in your lap. Now bring them up slowly and make a rainbow shape to show the sun rising and making everything bright and sunny.</i>	hold hands low and close together with palms facing down, raise hands slowly in an arc spreading them apart to show the sun coming up
appear	when something can be seen <i>The boy waited for a star to appear in the morning. Hold your hands in fists out in front of you. Now open your hands quickly to make your fingers appear.</i>	hold hands in a fist in front of you and quickly open them up and spread your fingers

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you enjoy that story? (thinking gesture - finger on forehead)

Thumbs up if you think you could catch a star. (thinking gesture - finger on forehead)

Check their understanding.

Who was this book about?

(Thinking gesture and then hand open to note choral response- a boy who loved stars)

What was the boy trying to catch?

(Thinking gesture and then hand open to note choral response- a star)



1st Read

How to Catch a Star

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>A <u>star</u> is a glowing light in the sky, the sun is our biggest star. Ready to clap? Star.</i>	make a fist in front of you and open and close it with your palm facing out
<i><u>Sunrise</u> is the time when the sun starts to come up in the morning. Sun-rise. Sunrise.</i>	hold hands low and close together with palms facing down, raise hands slowly in an arc spreading them apart to show the sun coming up
<i><u>Appear</u> means when something can be seen. Ap-pear. Appear.</i>	hold hands in a fist in front of you and quickly open them up and spread your fingers

Ask questions (thinking gesture) with choral responding (open hand gesture).

Do stars appear in the morning?

Everyone (no)

Do stars appear at nighttime?

Everyone (yes)

Does sunrise happen in the morning?

Everyone (yes)

Does sunrise happen at night?

Everyone (no)

3. Follow Up Activity- Wrap up sub-theme (Moon and Stars)

Explain, *We have learned a lot about the moon and stars We are going to share one thing we know about each of those things. Let's take a moment now to think to ourselves. What is one thing you know about the moon?* (thinking gesture - finger on forehead) *When you are ready to share put your thumb up* Encourage all children to think of one thing and put thumb up. Call on a couple children to share. Then tell everyone to share all at once!



For the Teacher:

Preview

I Want to be an Astronaut



Unit 4: Astronomy, Part 3 - Astronauts

Book 17: *I Want to be an Astronaut* by Byron Barton

Materials Needed: None

Vocabulary

Word	Definition	Gesture
astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
crew	a group of astronauts working together	clasp hands together in front of you to show a group working together as one
mission	a job that astronauts do in space	extend one arm like pointing toward the stars

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read

I Want to be an Astronaut

Before

1. **Topic Introduction-** *We have been learning all about astronomy, the study of space. We learned about the universe and planets. We learned about the moon and stars. Today we are going to start learning about something new in astronomy.*
2. **Book Introduction-** *Look at this picture. This person is floating in space and they're wearing a space suit. I think this is an astronaut. An astronaut is a person who is trained to go into space.*
3. **Title and Author-** Draw attention to title and author. *This story is called I Want to Be an Astronaut. Byron Barton is the author and illustrator. That means he wrote the words and... (Thinking gesture and then hand open to note choral response- drew the pictures) That is right! The author writes the words and the illustrator draws the pictures, sometimes they do both!*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"I want to be an astronaut,"	TA: <i>I think being an astronaut would be interesting, but I'm not sure I want to be an astronaut. I'm going to keep reading to see if I learn more about what astronauts do.</i>
"and sleep in zero gravity"	TA: <i>There is no gravity in space so astronauts float around on the spaceship. They have to tie themselves down to sleep.</i>
"and build a factory in orbit"	TA: <i>I didn't know astronauts build things in space. They are so brave!</i>



1st Read

I Want to be an Astronaut

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Astronauts do lots of important, brave, and fun things in space.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
astronaut	a person who is trained to travel to outer space <i>Astronauts do many things in space! Hold your arms out and pretend you are floating in space like an astronaut.</i>	hold arms out by your side and move around like floating in space
crew	a group of astronauts working together <i>They want to be part of the astronaut crew. Clasp your hands together in front of you to show a group working together as one, just like a crew does.</i>	clasp hands together in front of you to show a group working together as one
mission	a job that astronauts do in space <i>Astronauts do missions in space. Take one arm and point it up to the stars, like you are ready to go on a mission.</i>	extend one arm like pointing toward the stars

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like that story? Would you like to be an astronaut? (thinking gesture - finger on forehead)
Put your thumb up if you would like to be an astronaut.

Check their understanding.

Who was this book about? (Thinking gesture and then hand open to note choral response- astronauts)

What do astronauts do? (thinking gesture - finger on forehead). *Put your thumb up when you have an idea to share.* (Call on 1-2 students with thumbs up to share responses- various answers- go on missions, fix satellites, etc.)



1st Read

I Want to be an Astronaut

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>An <u>astronaut</u> is a person who is trained to travel to outer space. Ready to clap? As-tro-naut, astronaut.</i>	hold arms out by your side and move around like floating in space
<i>The <u>crew</u> is a group of astronauts working together. Crew.</i>	clasp hands together in front of you to show a group working together as one
<i>A <u>mission</u> is a job that astronauts do in space. Mis-sion. Mission.</i>	extend one arm like pointing toward the stars

Ask questions (thinking gesture) with choral responding (open hand gesture).

If you are trained to travel to outer space you can be an _____? (thinking gesture - finger on forehead)
Everyone (hand open to note choral response - astronaut)

A group of astronauts that work together are called a _____. (thinking gesture - finger on forehead)
Everyone (hand open to note choral response - crew)

When astronauts do jobs in space it is called a _____. (thinking gesture - finger on forehead) *Everyone*
(hand open to note choral response - mission)

3. Follow Up Activity

Explain, *We talked about some of the important words in this story. One word we learned was astronaut. An astronaut is a person who is trained to travel in space. I'm going to say an important job and you're going to tell me if it is something an astronaut might do.*

- *walk around in space* (Thinking gesture and then hand open to note choral response- yes)
- *take care of animals* (Thinking gesture and then hand open to note choral response- no)
- *help fix a satellite* (Thinking gesture and then hand open to note choral response- yes)
- *drive a train* (Thinking gesture and then hand open to note choral response- no)



Shared Writing

I Want to be an Astronaut



Planning Guide - Express Ideas

Topic Sentence: Write the topic sentence on the board, leaving a blank space for the underlined word:

It would be great to be an astronaut.

Plan your detail and concluding sentences (You can utilize the following.)

Detail: *It would be fun to travel on a spaceship.*

Detail: *I would like to fix satellites with my crew.*

Detail: *No gravity would be cool.*

Conclusion: *Astronauts are lucky!*

Vocabulary to Include if Possible

Word	Definition	Gesture
astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
crew	a group of astronauts working together	clasp hands together in front of you to show a group working together as one
mission	a job that astronauts do in space	extend one arm like pointing toward the stars

Discuss the book and vocabulary: Hold up the book. *We read this book called I Want to Be an Astronaut. Do you remember some of the fun things astronauts do?* (thinking gesture - finger on forehead) *If you have an idea to share, show a thumbs up.* Encourage all to think about their answer and call on 1-2 students who have their thumbs up to share responses- various answers) *Astronauts also do important work and sometimes they have to be very brave.*

Write Topic Sentence

- Plan:** *Let's work together to express that we think being an astronaut is a very cool job.* Point to the written topic sentence and read the sentence noting the blank. *What word is missing in this sentence? What did we read about in this book?* (thinking gesture - finger on forehead and then hand open to note choral response - astronaut)
- Write:** Write the word to complete the sentence.
- Read aloud, pointing to each word:** *It would be great to be an astronaut.*



Shared Writing

I Want to be an Astronaut



Write Detail Sentence(s)

1. **Plan:** *Let's tell about some cool things astronauts do.* Guide children by showing them a few pictures in the book, if necessary. Remember the planned detail sentences are available if your students need more direction. Otherwise, write the ideas they share.
2. **Write:** *It would be fun to travel on a spaceship.*
3. **Read** aloud, pointing to each word: *It would be fun to travel on a spaceship.* Read again, encouraging children to read with you.

Continue adding detail sentences if students are engaged. This can also be returned to tomorrow or added to later in the day.

Write Concluding Sentence

1. **Plan:** *We told about some interesting things astronauts do. Now, how do we tell our readers that we are done?*
2. **Write:** *Astronauts are lucky!*
3. **Read** aloud, pointing to each word: *Astronauts are lucky!* Read again, encouraging children to read with you

Read the whole paragraph with students. Post writing where they can see it.



For the Teacher:
Preview
Small World



Unit 4: Astronomy, Part 3 - Astronauts
Book 18: *Small World* by Ishta Mercurio
Materials Needed: None

Vocabulary		
Word	Definition	Gesture
microscopic	so tiny it can only be seen with a microscope	hold thumb and pointer fingers together with a small amount of space between them up by your eye
foreign	unfamiliar, strange	put hand on the side of head like you are thinking, then extend hand out with palm up and shrug shoulders
orbit	travel in a circle around something	hold one finger pointing up, and move it around in a circle

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
 (open and close hands)

How I wonder what you are
 (point to temple with pointer finger)

Up above the world so high
 (point up)

Like a diamond in the sky
 (make a diamond with fingers)

Twinkle, twinkle little star
 (open and close hands)

How I wonder what you are
 (point to temple with pointer finger)



1st Read Small World

Before

1. **Topic Introduction-** *We have been learning about astronomy. Yesterday we started reading about an important job related to astronomy. Astronaut! Let's clap that word. As-tro-naut. An astronaut is a person who is trained to travel into space.*
2. **Book Introduction-** *This is an interesting picture. It looks like a little girl looking at a model of the solar system.*
3. **Title and Author-** Draw attention to title and author. *This story is called Small World. The author is Ishta Mercurio. What does the author do?* (Thinking gesture and then hand open to note choral response- writes the words) *Writes the words! The pictures are by Jen Corace. She is the...* (Thinking gesture and then hand open to note choral response- illustrator) *illustrator.*

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"It became the circle of her loving family."	TA: <i>When the girl was a baby, her world was her mother's arms. Now her world is her whole family.</i>
"Nanda got bigger and bigger. But as she grew, the world grew too."	TA: <i>As we get bigger and can do more things, does the Earth really get bigger? No! We just learn more about the world.</i>
"Nanda got bigger and bigger and BIGGER. But as she grew, the world grew, too."	TA: <i>Here's Nanda flying a plane. I think she grew up to be a pilot.</i>
"her feet touched foreign soil."	TA: <i>Wow! Nanda is an astronaut. She grew up to be an astronaut. It looks like she might be exploring the moon.</i>



1st Read Small World

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: As we get bigger, we learn more about the world.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
microscopic	so tiny it can only be seen with a microscope <i>Snowflakes have beautiful shapes that can only be seen with a microscope. Make a tiny space between your thumb and pointer finger and hold it up to your eye to show something is microscopic</i>	hold thumb and pointer fingers together with a small amount of space between them up by your eye
foreign	unfamiliar, strange <i>Nanda is standing somewhere foreign. Put one hand on the side of your head like you are thinking. Then move your hand out in front of you with your palm up and shrug your shoulders.</i>	put hand on the side of head like you are thinking, then extend hand out with palm up and shrug shoulders
orbit	travel in a circle around something <i>Our planet, Earth, orbits around the sun. Hold one finger pointing up and move it around in a circle, like an orbit.</i>	hold one finger pointing up, and move it around in a circle

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like this story? (thinking gesture - finger on forehead)

Show me a thumb up if you liked this story and a thumbs down if you did not. What was your favorite part of this story? (thinking gesture - finger on forehead)

Turn to someone next to you and tell them your favorite part. Start your sentence with "My favorite part was..."

Check their understanding.

Who was the story about? (Thinking gesture and then hand open to note choral response- Nanda)

What does Nanda become when she grows up? (Thinking gesture and then hand open to note choral response- an astronaut)



1st Read Small World

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>Microscopic means something is so tiny that it can only be seen with a microscope. Ready to clap? Mi-cro-scop-ic, microscopic.</i>	hold thumb and pointer fingers together with a small amount of space between them up by your eye
<i><u>Foreign</u> means something or someplace is strange or unfamiliar. For-eign. Foreign.</i>	put hand on the side of head like you are thinking, then extend hand out with palm up and shrug shoulders
<i><u>Orbit</u> means to travel in a circle around something. Or-bit. Orbit.</i>	hold one finger pointing up, and move it around in a circle

Ask questions (thinking gesture) with choral responding (open hand gesture).

Is an elephant microscopic?

Everyone (no)

Is one piece of salt microscopic?

Everyone (yes)

Are germs microscopic?

Everyone (yes)

Are you microscopic?

Everyone (no)

3. Follow Up Activity- Story Retell

Explain, *We are going to tell the story again. I want you to help me.* Show pictures in book to help children remember if necessary.

When Nanda was born, her world was safe, warm, and _____ (small.) As she grew, Nanda learned more about the world and it seemed to grow, too. Nanda made friends, explored new places, and even flew a small _____ (plane.) Then one day when Nanda was the biggest she had ever been, she became an _____ (astronaut.)



2nd Read Small World



Unit 4: Astronomy, Part 3 - Astronauts

Book 18: *Small World* by Ishta Mercurio

Re-Read & Activity: When I Grow Up activity

Materials Needed: None

Before

1. **Ask if they can remember what this book is about-** show them the cover to remind them.
We have already read this story. Do you remember it? Look at the cover. What is she looking at? (Thinking gesture and then hand open to note choral response- the planets)
2. **Point out title & author-** ask if anyone can tell you what the author does.
The title of this story is Henry's Stars. The author of the story is Ishta Mercurio. Who remembers what the author does? Tell me! (Thinking gesture and then hand open to note choral response- write the words) *Yes, the author writes the words. The illustrator is also Jen Corace. She made the pictures.*
3. **Tell them this time we are going to read and discuss the story** so be ready to share your ideas!
We are going to read the story again. Pay close attention so we can talk about the book when it's done.

During

1. **Read** with excitement and fluency.
2. **Think Aloud and Ask Questions as you read.**

Part of Text	Think Aloud (TA) - Question (Q)
"A bubble of giggling playmates..."	Q: <i>Do you think Nanda is happy as her world is getting bigger?</i>
"and coasting through the night"	TA: <i>Nanda is riding a roller coaster at night.</i> Q: <i>Would you like to try that?</i>
"a human-powered helicopter lifting toward the sky"	Q: <i>Would you try a helicopter like this one?</i>
"And the Earth, softly glowing. A circle called home."	Q: <i>Do you want to see Earth from space?</i>



2nd Read Small World



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: As we get bigger, we learn more about the world.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
microscopic	so tiny it can only be seen with a microscope <i>Snowflakes have beautiful shapes that can only be seen with a microscope. Make a tiny space between your thumb and pointer finger and hold it up to your eye to show something is microscopic</i>	hold thumb and pointer fingers together with a small amount of space between them up by your eye
foreign	unfamiliar, strange <i>Nanda is standing somewhere foreign. Put one hand on the side of your head like you are thinking. Then move your hand out in front of you with your palm up and shrug your shoulders.</i>	put hand on the side of head like you are thinking, then extend hand out with palm up and shrug shoulders
orbit	travel in a circle around something <i>Our planet, Earth, orbits around the sun. Hold one finger pointing up and move it around in a circle, like an orbit.</i>	hold one finger pointing up, and move it around in a circle

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like this story? (thinking gesture - finger on forehead)

Show me a thumb up if you liked this story and a thumbs down if you did not. What was your favorite part of this story? (thinking gesture - finger on forehead)

Turn to someone next to you and tell them your favorite part. Start your sentence with "My favorite part was..."

Check their understanding.

Who was the story about? (Thinking gesture and then hand open to note choral response- Nanda)

What does Nanda become when she grows up? (Thinking gesture and then hand open to note choral response- an astronaut)



2nd Read Small World



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
<i>Microscopic means something is so tiny that it can only be seen with a microscope. Ready to clap? Mi-cro-scop-ic, microscopic.</i>	hold thumb and pointer fingers together with a small amount of space between them up by your eye
<i><u>Foreign</u> means something or someplace is strange or unfamiliar. For-eign. Foreign.</i>	put hand on the side of head like you are thinking, then extend hand out with palm up and shrug shoulders
<i><u>Orbit</u> means to travel in a circle around something. Or-bit. Orbit.</i>	hold one finger pointing up, and move it around in a circle

3. Follow-Up Activity: When I Grow Up activity

Remind students, *Nanda liked to explore and discover new things. When she grew up she became an astronaut. What would you like to be when you grow up? There are so many different possibilities!* List some familiar and unfamiliar occupational opportunities for your students. Give students the coloring tools (crayons or markers) and a craft template. When their pictures are complete, write their chosen occupation to complete the sentence.

Name: _____

When I grow up, I want to be _____.



For the Teacher:

Preview

Mae Among the Stars



Unit 4: Astronomy, Part 3 - Astronauts

Book 19: *May Among the Stars* by Roda Ahmed

Materials Needed: None

Vocabulary

Word	Definition	Gesture
astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
profession	a job that grown ups do	pretend to type on a keyboard
disappointed	sad that things didn't go the way you planned	make a frowning face and cross arms

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read

Mae Among the Stars



Before

1. **Topic Introduction-** *We have been reading about the people who are trained to travel in outer space. What do we call those people?* (Thinking gesture and then hand open to note choral response- astronauts) *Astronauts. Let's clap that word. As-tro-naut.*
2. **Book Introduction-** *Can you guess what this story is going to be about?* (thinking gesture - finger on forehead) *Yes, an astronaut. This book is about a famous astronaut.*
3. **Title and Author-** Draw attention to title and author. *The title of this book is Mae Among the Stars. Mae Jemison is a famous astronaut. This book is about her. The author is Roda Ahmed. The illustrator is Stasia Burrington. Do you remember what the illustrator does? They...* (Thinking gesture and then hand open to note choral response- draw the pictures)

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"That's an amazing plan."	<p>TA: <i>Her parents believe she can be an astronaut. Look at the moon.</i></p> <p>Q: <i>Is it full? No.</i></p>
"All the kids started laughing."	<p>TA: <i>That is not kind!</i></p> <p>Q: <i>How do you think Mae felt?</i></p>
"If I work hard for it, anything is possible."	<p>TA: <i>Let's say that together. "Anything is possible." One more time. "Anything is possible."</i></p>



1st Read

Mae Among the Stars



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Anything is possible if you dream it and work hard.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
astronaut	a person who is trained to travel to outer space <i>Mae wants to be an astronaut when she grows up. Hold your arms out by your side and pretend like you are floating in space like an astronaut.</i>	hold arms out by your side and move around like floating in space
profession	a job that grown ups do <i>There are many different professions, many jobs you can do. Pretend to type on a keyboard.</i>	pretend to type on a keyboard
disappointed	sad that things didn't go the way you planned <i>Mae is disappointed that her teacher said she should be a nurse instead. Make a frowning face and cross your arms to show disappointed.</i>	make a frowning face and cross arms

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

*Did you like that story? Did you enjoy learning about Mae? (thinking gesture - finger on forehead)
Put your thumb up if you liked learning about her.*

Check their understanding.

Who was this book about?

(Thinking gesture and then hand open to note choral response- Mae Jemison)

What did Mae want to be when she grew up?

(Thinking gesture and then hand open to note choral response- an astronaut)

Who is Mae Jemison? Is she a real person or a pretend character?

(Thinking gesture and then hand open to note choral response- real person)



1st Read

Mae Among the Stars



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
An <u>astronaut</u> is a person who is trained to travel to outer space. Ready to clap? As-tro-naut, astronaut.	hold arms out by your side and move around like floating in space
A <u>profession</u> is a job that grown ups do. Pro-fes-sion. Profession.	pretend to type on a keyboard
<u>Disappointed</u> is when you are sad that things didn't go the way you planned. Dis-ap-poin-ted. Disappointed.	make a frowning face and cross arms

Ask questions (thinking gesture) with choral responding (open hand gesture).

Would you be disappointed if you had your favorite food for lunch?

Everyone (no)

Would you be disappointed if it was raining when you wanted to play outside?

Everyone (yes)

Would you be disappointed if you had to go to bed early?

Everyone (yes)

Would you be disappointed if someone gave you a present?

Everyone (no)

3. Follow Up Activity- More learning

Read all, or just some, of the last page. This page contains additional facts about Mae Jemison's life. She is an amazing person and an inspiration for many!



For the Teacher:

Preview

Rocket Says Look Up!



Unit 4: Astronomy, Part 3 - Astronauts

Book 20: *Rocket Says Look Up!* by Nathan Bryon

Materials Needed: None

Vocabulary

Word	Definition	Gesture
telescope	a tool for looking at things that are far away	make two circles with your hands and put them on top of each other, then put them up to your eye
meteor	bits of dust burning up in the atmosphere	point up to the sky and make an arch in front of you (like a meteor flying through the sky)
prepared	to be ready for something	thumbs up and nod head

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star

(open and close hands)

How I wonder what you are

(point to temple with pointer finger)

Up above the world so high

(point up)

Like a diamond in the sky

(make a diamond with fingers)

Twinkle, twinkle little star

(open and close hands)

How I wonder what you are

(point to temple with pointer finger)



1st Read

Rocket Says Look Up!



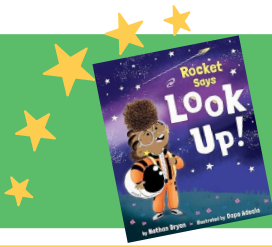
Before

1. **Topic Introduction-** *We have been reading about astronauts. What do you remember about astronauts?* (thinking gesture - finger on forehead) *Turn to someone near you and tell them one thing you know about astronauts.*
2. **Book Introduction-** *This story is called Rocket Says Look Up! The girl is named Rocket. Can you guess what she wants to be when she grows up?* (thinking gesture - finger on forehead) *An astronaut! She looks so happy!*
3. **Title and Author-** Draw attention to title and author. *The author of this book is Nathan Bryon. What does the author do?* (Thinking gesture and then hand open to note choral response- write the words) *The illustrator is Dapo Adeola. What does the illustrator do?* (Thinking gesture and then hand open to note choral response- draw the pictures)

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"- like Mae Jemison, the first African American woman in space."	TA: <i>Rocket wants to be an astronaut like Mae Jemison. I remember reading about her.</i>
"I'm going to see something incredible: The Phoenix Meteor Shower"	TA: <i>I wonder what that is. It must be really interesting because Rocket wants everyone to see it with her.</i>
"I'm so happy we looked up and saw them together."	TA: <i>Rocket waited so long to see the Phoenix Meteor Shower and it finally happened. How cool!</i>



1st Read

Rocket Says Look Up!



During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: A meteor shower happens when the Earth travels through dust left by a comet.

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
telescope	a tool for looking at things that are far away <i>Rocket sets up her telescope every night. Make a circle with each of your hands then put those circles together to make a long telescope. Now pretend to look through.</i>	make two circles with your hands and put them on top of each other, then put them up to your eye
meteor	bits of dust burning up in the atmosphere <i>Rocket wants everyone to see the meteor shower. Point up to the sky and make a rainbow shape with your finger, like you are watching a meteor fly through the sky.</i>	point up to the sky and make an arch in front of you (like a meteor flying through the sky)
prepared	to be ready for something <i>Rocket prepared to become an astronaut. Put a thumb up and nod your head to show you are prepared.</i>	thumbs up and nod head

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like that story? (thinking gesture - finger on forehead)

Put your thumb up if you liked this book and a thumbs down if you didn't. What was your favorite part? (thinking gesture - finger on forehead)

Turn to someone next to you and tell them your favorite part. Start your sentence with "My favorite part was..."

Check their understanding.

Who was this story about?

(Thinking gesture and then hand open to note choral response- Rocket, her brother Jamal)

Where did they go to see the meteor shower?

(Thinking gesture and then hand open to note choral response- the park)



1st Read

Rocket Says Look Up!



After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture with you.**

Word Definition to use	Gesture
A <u>telescope</u> is a tool for looking at things that are far away. Ready to clap? Tel-e-scope, telescope.	make two circles with your hands and put them on top of each other, then put them up to your eye
A <u>meteor</u> is bits of dust burning up in the atmosphere. Me-te-or. Meteor.	point up to the sky and make an arch in front of you (like a meteor flying through the sky)
<u>Prepared</u> is when you are ready for something. Pre-pared. Prepared.	thumbs up and nod head

Ask questions (thinking gesture) with choral responding (open hand gesture).

Would you be prepared for school if you forgot your backpack?

Everyone (no)

Would you be prepared to drive if you were buckled up?

Everyone (yes)

Would you use a telescope or a microscope to see something far away?

Everyone (telescope)

Would you use a telescope or a microscope to see something very small?

Everyone (microscope)

3. Follow Up Activity- Story Retell

Explain, *We are going to tell the story again. I want you to help me.* Show pictures in book to help children remember if necessary.

Rocket wants to be the greatest astronaut when she grows up, just like _____ (Mae Jemison.) Rocking is always looking _____ (up!) Her next mission is to see the famous Phoenix Meteor Shower. She makes flyers and invites everyone to watch with her. When it's time, they go to the _____ (park). They wait a really long time and don't see anything. Suddenly, the sky lights up and they watch the meteor show. Rocket is so happy they looked up and saw it _____ (together.)



For the Teacher:
Preview
Astronaut Training

Unit 4: Astronomy, Part 3 - Astronauts

Book 21: *Astronaut Training* by Aneta Cruz

Materials Needed: None

Vocabulary		
Word	Definition	Gesture
astronaut	a person who is trained to travel to outer space	hold arms out by your side and move around like floating in space
mission	a job that astronauts do in space	extend one arm like pointing toward the stars
amazed	feeling very surprised by something	mouth wide open with eyes wide

Language Time

Twinkle, Twinkle Little Star

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)

Up above the world so high
(point up)

Like a diamond in the sky
(make a diamond with fingers)

Twinkle, twinkle little star
(open and close hands)

How I wonder what you are
(point to temple with pointer finger)



1st Read

Astronaut Training

Before

1. **Topic Introduction-** *We have been learning about astronomy, the study of space. Today we are going to read our last book about astronomy.*
2. **Book Introduction-** *It looks like this girl might be holding a model of the Earth. I see some other space things around her.*
3. **Title and Author-** Draw attention to title and author. *This book is called Astronaut Training. I think this girl wants to be an astronaut just like Rocket and Mae Jemison did. The author of this book is Aneta Cruz. What does the author do?* (Thinking gesture and then hand open to note choral response- write the words) *The illustrator is Olivia Aserr. What does the illustrator do?* (Thinking gesture and then hand open to note choral response- draws the pictures)

During

1. **Read-** Read with few interruptions so children can follow the full story.
2. **Model Thinking Aloud-** Pause to model what good readers think about.

Part of Text	Think Aloud (TA) - Question (Q)
"and Astrid soon ran out of all the numbers she knew."	TA: <i>I've never tried to count the stars, but I don't think I would be able to do it either. There are just so many!</i>
"She chose the biggest one, made a wish, and..."	TA: <i>Astrid made a wish on a big star. I wonder what's going to happen?</i>
"chose the smallest one, and set her course."	TA: <i>When she wished on the big star, she landed on a planet where everything was big. What will happen now?</i>
"after a bit more training, of course."	TA: <i>Astrid wants to train more before she becomes an astronaut. What is she doing to train? Reading a book about space!</i>



1st Read

Astronaut Training

During Continued

3. **Draw Attention to Key Events and Vocabulary-** Pause to highlight vocabulary and key concepts.

Key content: Being an astronaut takes a lot of training

Vocabulary: briefly define/highlight vocab words when they come up in the story. Reinforce throughout the day.

Word	Definition to use and <i>how to introduce gesture</i>	Gesture
astronaut	a person who is trained to travel to outer space <i>Astrid's dream was to be an astronaut. Hold your arms out and pretend you are floating in space like an astronaut.</i>	hold arms out by your side and move around like floating in space
mission	a job that astronauts do in space <i>Astrid is getting ready for her mission. Take one arm and point it up to the stars, like you are ready to go on a mission.</i>	extend one arm like pointing toward the stars
amazed	feeling very surprised by something <i>The Bigs were amazed because they had never seen an astronaut before. Open your mouth and your eyes up wide like you are amazed.</i>	mouth wide open with eyes wide

After

1. **Ask Questions**

Now I am going to ask you a few questions about our story. When I put my finger to my forehead that means I want you to think about your answer.

Ask their opinion.

Did you like that story? (thinking gesture - finger on forehead)

Put your thumb up if you did and a thumb down if you didn't.

What was your favorite part? (thinking gesture - finger on forehead) *Start your sentence with "My favorite part was..."* Encourage all to think about their answer and call on 1-2 students who have their thumb up.

Check their understanding.

Who was this book about?

(Thinking gesture and then hand open to note choral response- Astrid)

What did Astrid want to become?

(Thinking gesture and then hand open to note choral response- an astronaut)



1st Read

Astronaut Training

After Continued

2. Review Vocabulary

In today's story, we learned 3 new words. Let's clap out our new words

Review each word stating the definition and making the gesture. **Encourage students to say the word and use the gesture**

Word Definition to use	Gesture
<i>An <u>astronaut</u> is a person who is trained to travel to outer space. Ready to clap? As-tro-naut, astronaut.</i>	hold arms out by your side and move around like floating in space
<i>A <u>mission</u> is a job that astronauts do in space. Mis-sion. Mission.</i>	extend one arm like pointing toward the stars
<i><u>Amazed</u> is when you feel very surprised by something. A-mazed. Amazed.</i>	mouth wide open with eyes wide

Ask questions (thinking gesture) with choral responding (open hand gesture).

Would you be amazed if you saw a meteor?

Everyone (yes)

Would you be amazed if you got to go in a rocket?

Everyone (yes)

Would you be amazed if you got to help on a mission?

Everyone (yes)

3. Follow Up Activity- Wrap up sub-theme (astronauts)

Explain, *We have learned a lot about astronauts. I'm going to say a fact about astronauts and I want you to finish my sentence. Ready?* Provide the first sound in the word if you think they need a clue!

- Astronauts are people who are trained to travel in sp_____. (space)*
- The very first female African American astronaut was Mae J_____. (Jemison)*
- Astronauts travel to space in _____.*
(Thinking gesture and then hand open to note choral response- spaceships, rockets)



Appendix

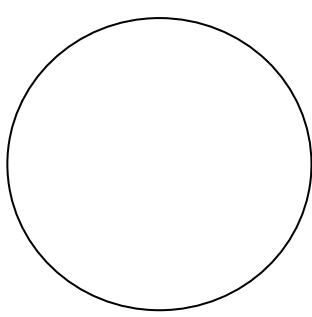
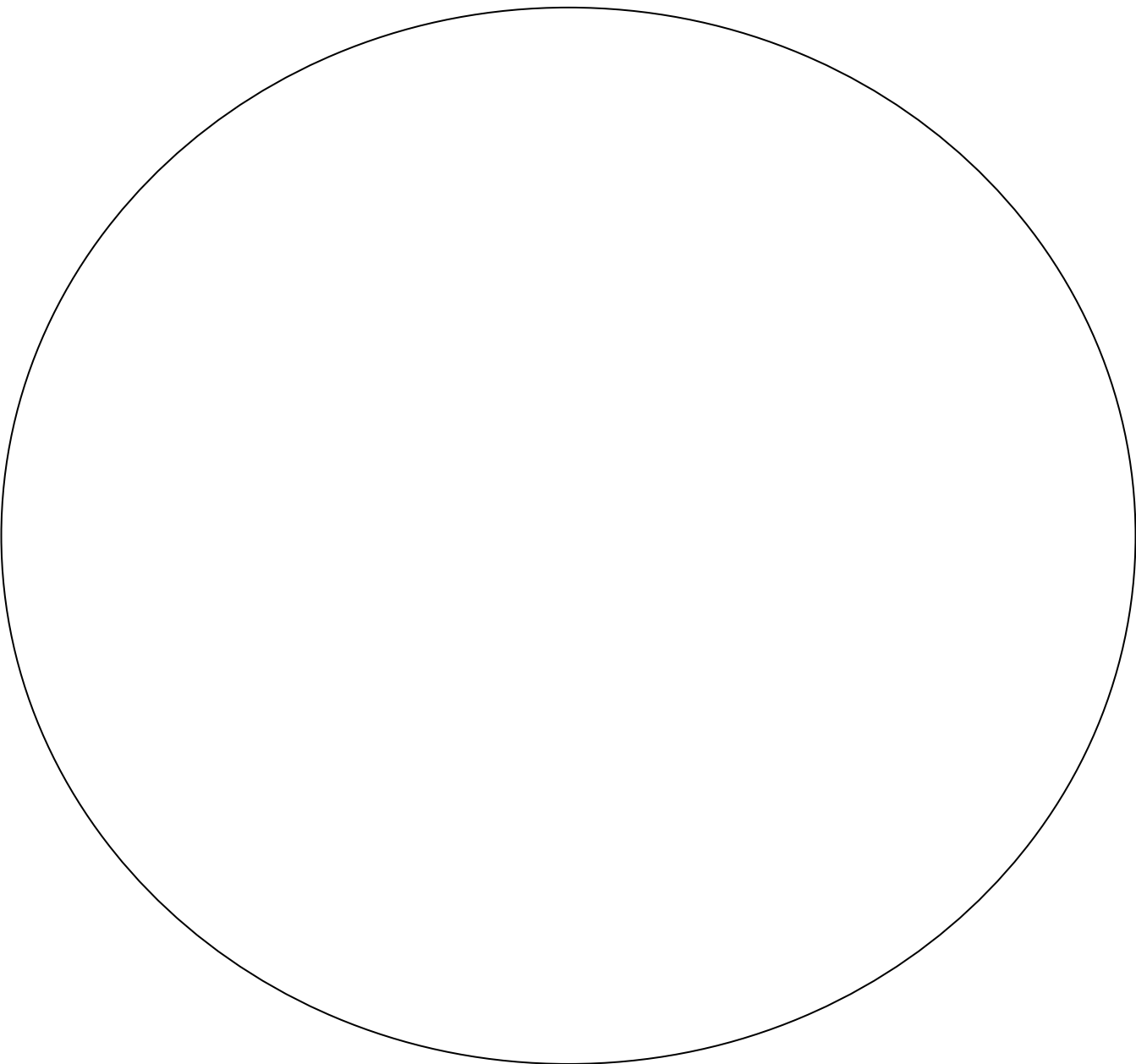
Blackline Masters

- ★ *Small World When I Grow Up* Template - one for each student
- ★ *Kitten's First Full Moon* Craft Template and Stars - one for each student
 - Print moon on cardstock
 - Cut stars from yellow paper
- ★ *Birthday on Mars Rovers* - one for each student



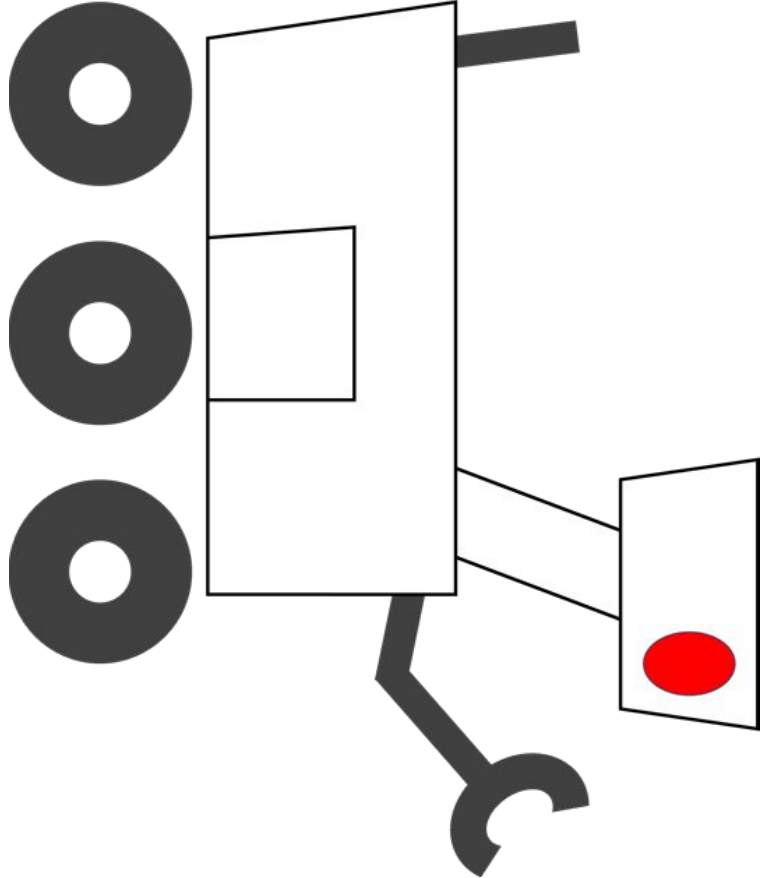
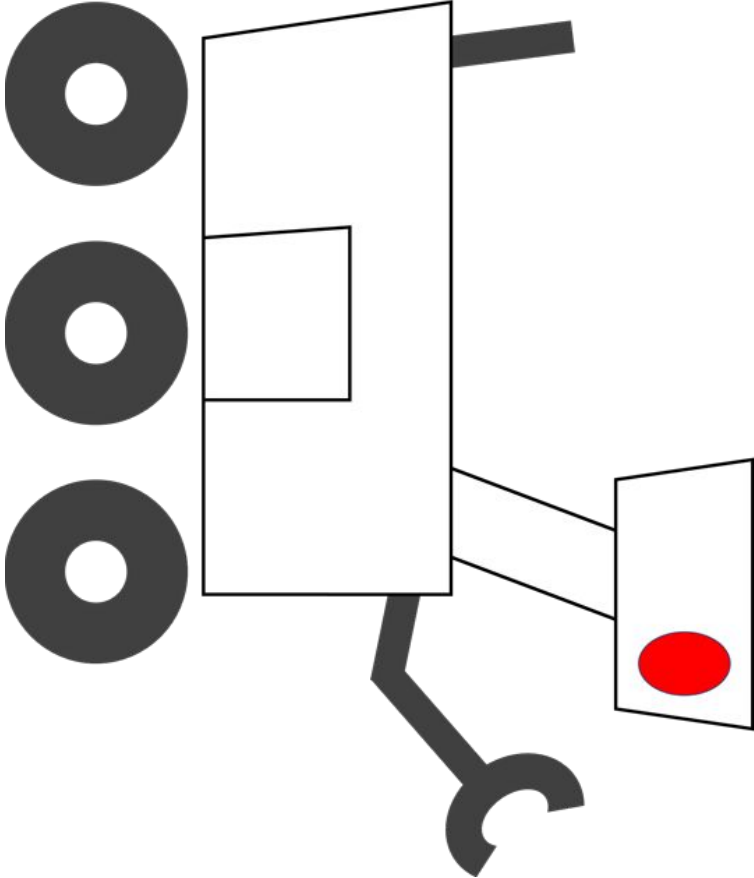
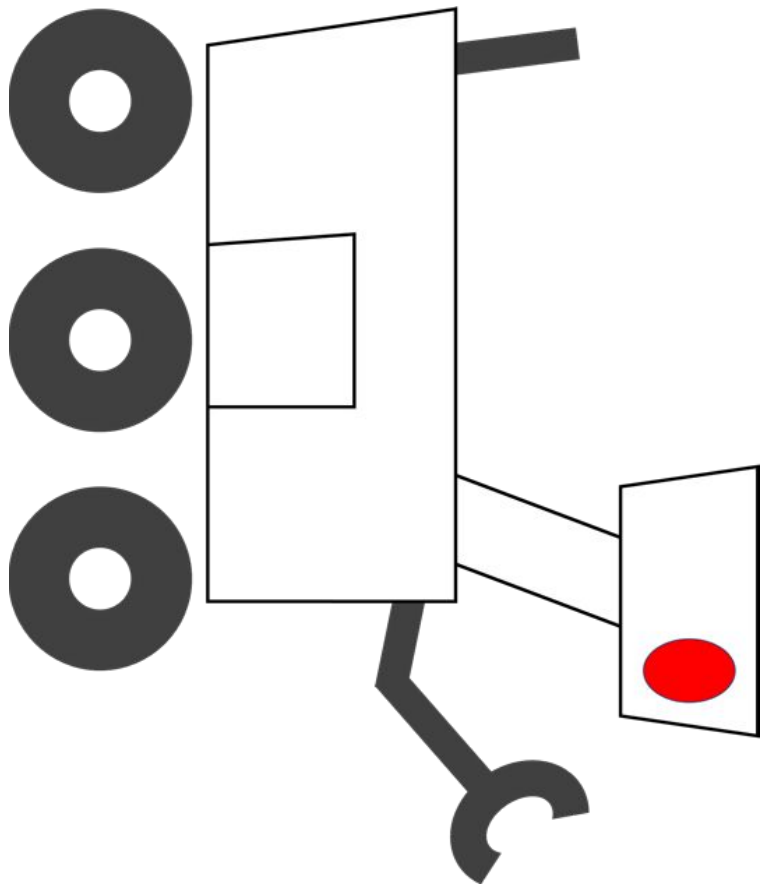
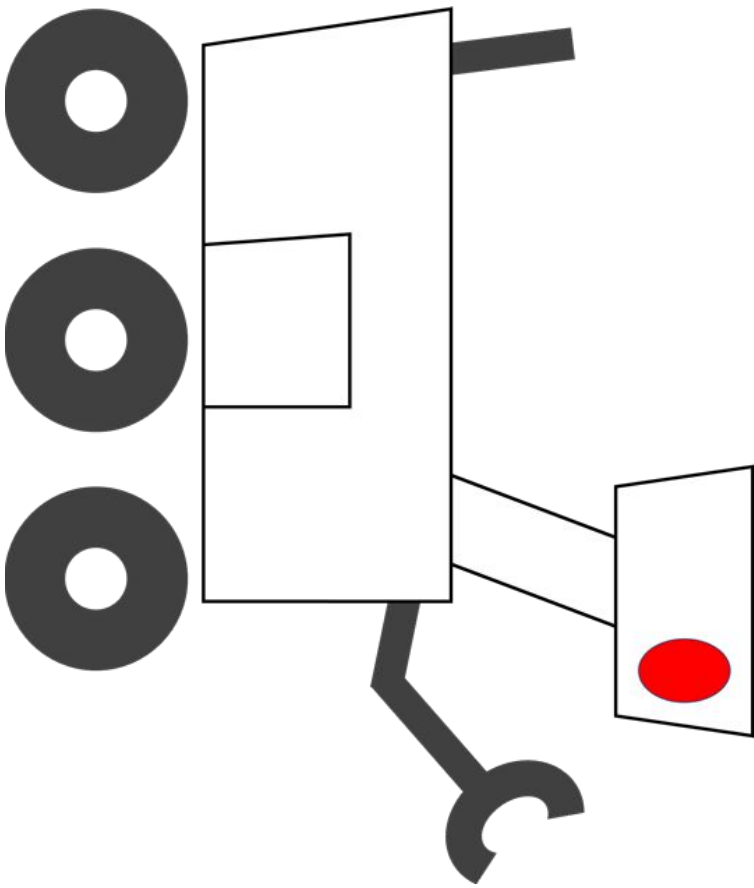
Name: _____

When I grow up, I want to be _____.



Kitten's First Full Moon

By: _____





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