

Unit 10

Blast Off Into Space



PK3





Unit 10

Blast Off Into Space



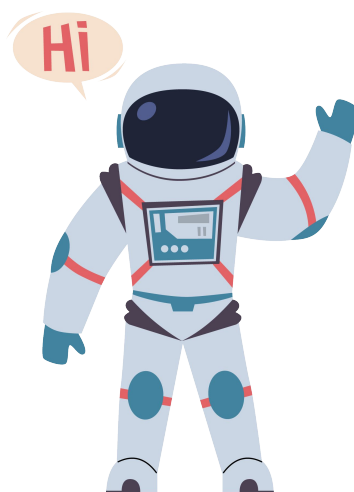
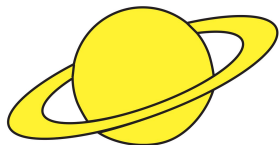
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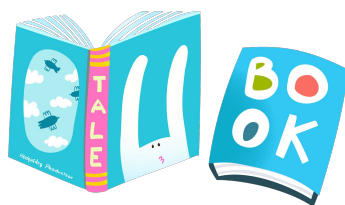
PK3 Unit 10 Overview



Dear Families,

Welcome to Unit 10, Blast Off Into Space! In this unit, your child will learn about the moon, space, astronauts, gravity, shadows, and reflections.

Unit 10 Books



- [Counting to 20 in Space](#) by Beryl Salinger Schmitt
- [Space](#) by Cathryn O'Sullivan
- [A Voyage to Space](#) by Katie Sivinski
- [Coyote and Rabbit](#) by Felicia R. Truong

Pre-recorded readings of all books are also available on the Sparkler app in the “Tips for Adults” section, Blast Off Into Space!

ECR@Home Activities will include making the Solar System and doing experiments to learn about gravity, the moon's phases, and daytime and nighttime. Your child will also make and count sets with up to 10 objects, identify numbers 0-10, blend the parts of words, make stories with two events, and learn ways to solve problems. You can incorporate these activities throughout your day by observing and drawing how the moon looks each night and going on a number scavenger hunt when doing errands or taking a walk.

Unit 10 Vocabulary

astronaut

gravity

moon

planet

reflection

shadow

space

space shuttle

Sun

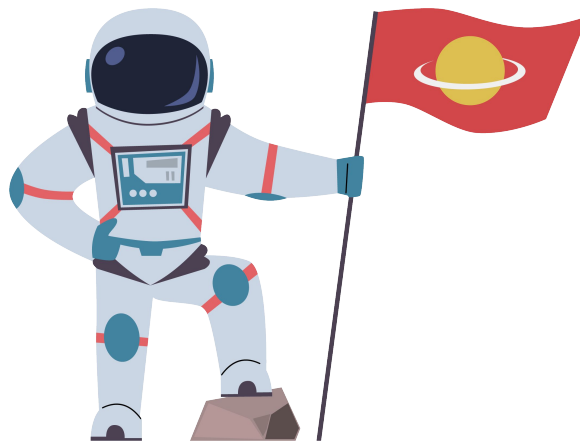
Week 1

PK3 Unit 10 Week 1 Overview

Sun & Moon, Day & Night

This week your child will:

Do experiments to learn about the moon's phases, day and night, and craters on the moon. They will blend the beginning and ending sounds of words, learn about ways to solve problems, and count and make sets with up to 10 objects. To extend these activities, talk about how the sky looks at different times of the day and count objects like forks as you set the table. Save your child's work, like the moon and parachute, so you can use it when playing together in Week 3.

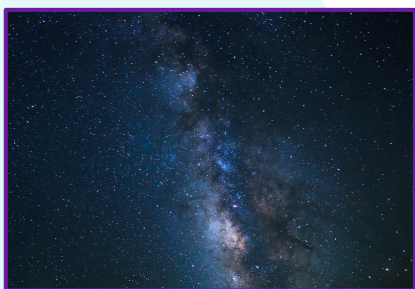


Key Vocabulary



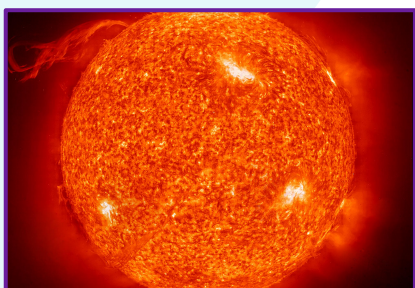
moon

a round object that orbits around a planet. Earth has one Moon which you can see shining in the sky at night



space

the area beyond the earth where the stars and planets are



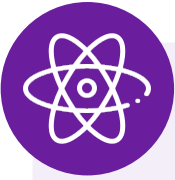
Sun

a star that we can see during the day that gives us light and heat

Create Connections

This week, you will learn about day and night. Before you begin the packet, write and draw about whether you prefer daytime or nighttime and why you prefer it.

**Think
About It!**



STEM: Name the Number (0-5)

MATERIALS: paper, crayons

- Create two sets of number cards 0-5. Give your child one set and keep the other.
- Show a number card. Ask your child to say the number. Have them find the same number card from their set.
- Switch roles. Have your child show the card. You say the number and find it.
- If your child can identify 0-5, add higher numbers to the set.

Save the number cards for later in the unit.



Independent Learning: View from Space

MATERIALS: [View from Space](#), paper, watercolor palette or crayons

- Use the pictures to talk with your child about what they think it would be like to be in space and look down at Earth.
- Have your child paint a picture of what they think they would see if they were in space.
- Ask, **Tell me about your painting! What can you see from space?**





Literacy: Blending Sounds

- **Let's blend words! I will blend the beginning sound and the rest of this word.**
H-at, h-at. Repeat faster as you blend the two parts together. **H-at, hat. You try, h-at, hat!**
- **Your turn!** Have your child blend other words ending in -at, c-at (cat), p-at (pat), and s-at (sat).

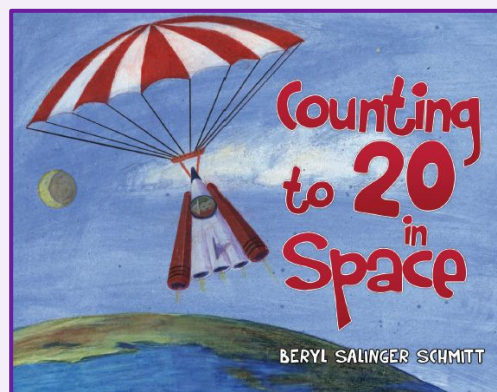


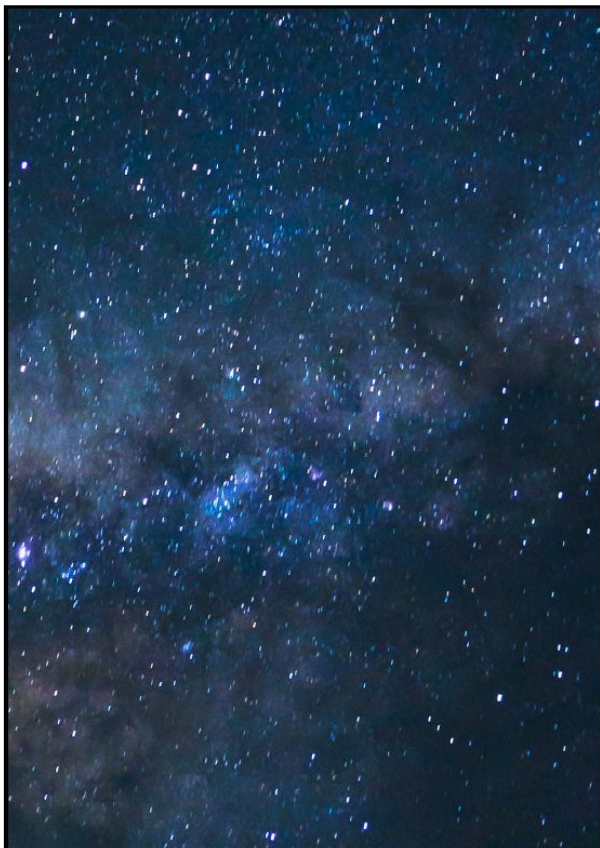
Read: *Counting to 20 in Space*

MATERIALS: [*Counting to 20 in Space*](#)

- Read the book with your child.
- After, ask, **What would you like to see if you went to space?**

You can also access a pre-recorded reading of this book on the Spakler app in the “Tips for Adults” section, Blast Off Into Space!

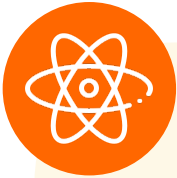




PK3 Blast Off Into Space

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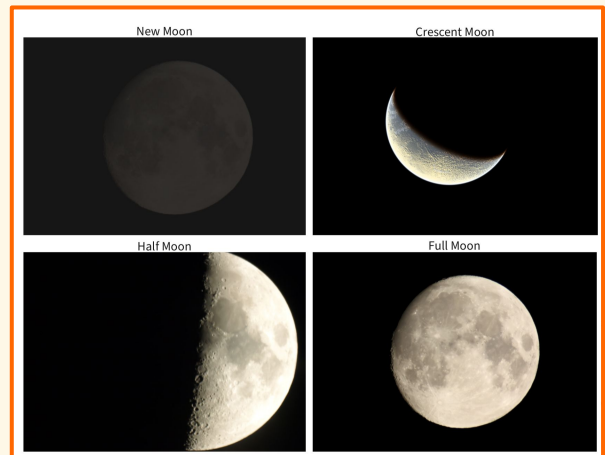
View from Space (FE)



STEM: The Moon

MATERIALS: [Solar System](#), [Moon](#), flashlight or phone app with flashlight, ball or crumpled paper in a ball shape or round fruit

- With your child, look at pictures of the moon. Describe each of the phases.
- Go into a dark room. Use a flashlight and ball to show why the moon changes size. Have your child hold the ball. Shine a flashlight on the ball and move the flashlight.
- Ask, **What do you notice?** Explain, **You can see different parts of the moon depending on where the light is shining.**



Independent Learning: Painting the Night Sky

MATERIALS: watercolor palette or crayons, paper, *optional - decorative items like glue, salt, glitter, or foil for tiny stars, cotton balls for clouds, etc.*

- Talk with your child about what they like to see in the sky at night. You can look at pictures on a tablet or phone.
- Allow your child to paint a picture of the night sky. They can place droplets of glue and sprinkle salt for stars or add cotton for clouds.
- After, ask, **Tell me about your night sky! What did you put in your picture?**



Literacy: How Was Your Day?

- Ask your child about their day. Guide them to share two events in order.
- **What did you do first? What did you do next?**



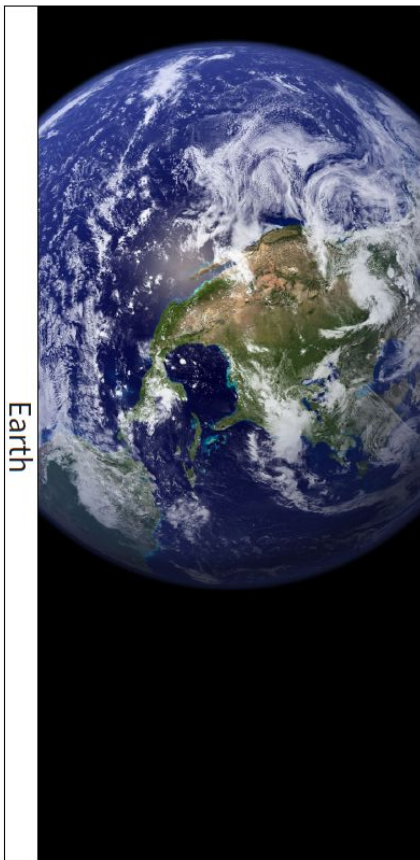
Journal Prompt: Visit to the Moon

MATERIALS: crayons, pencil, Visit to the Moon Journal Page

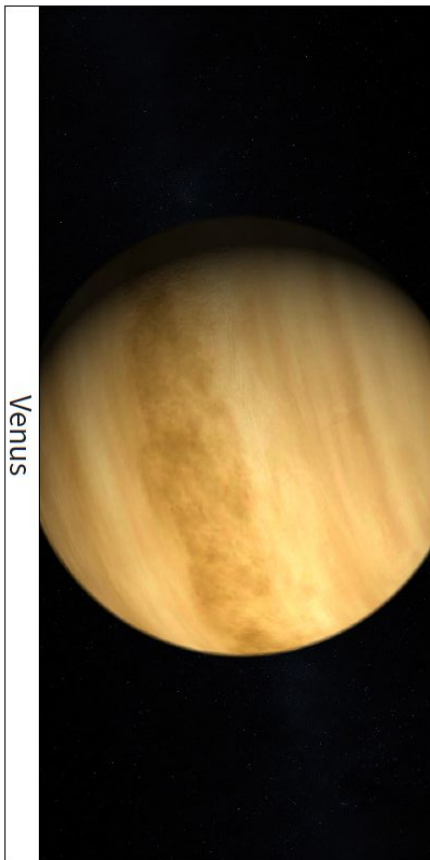
- With your child, talk about the moon.
- Say, **You can write and draw about what you would do if you could go to the moon.**
- Ask, **What did you write and draw about?**

Name: _____

If you could visit the moon what would you do there?



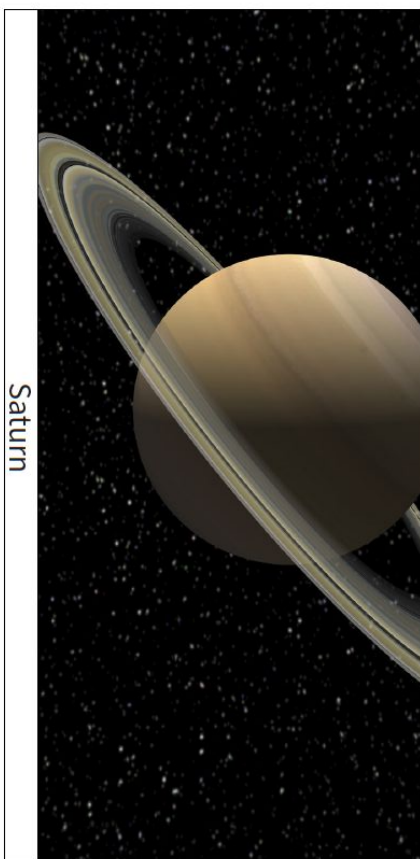
Earth



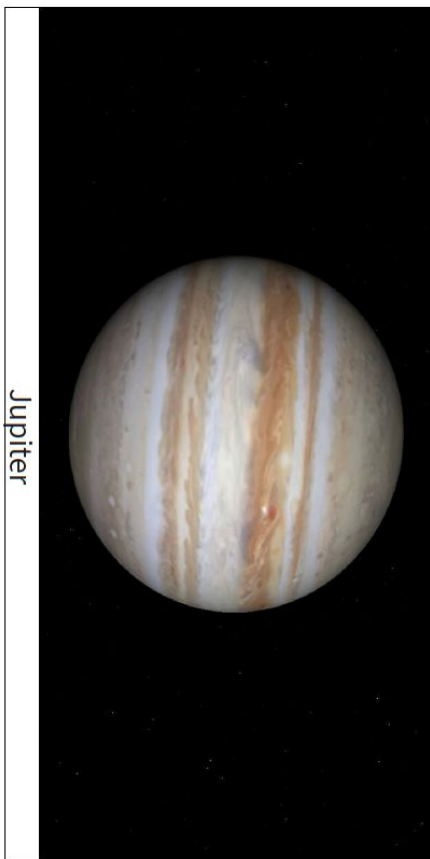
Venus



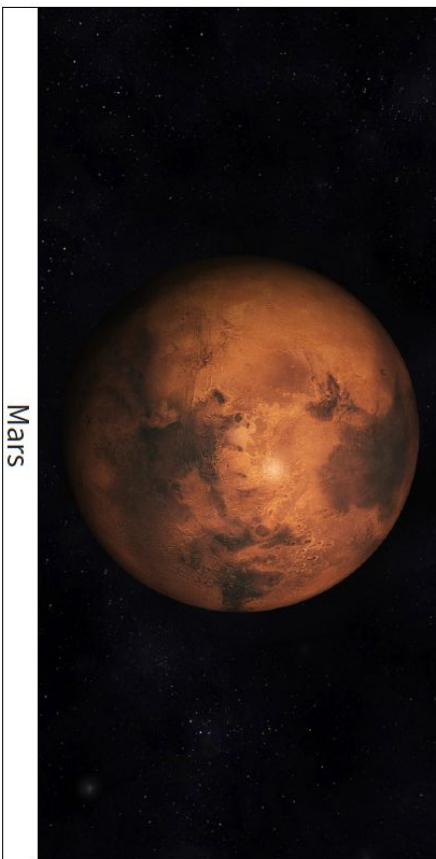
Mercury



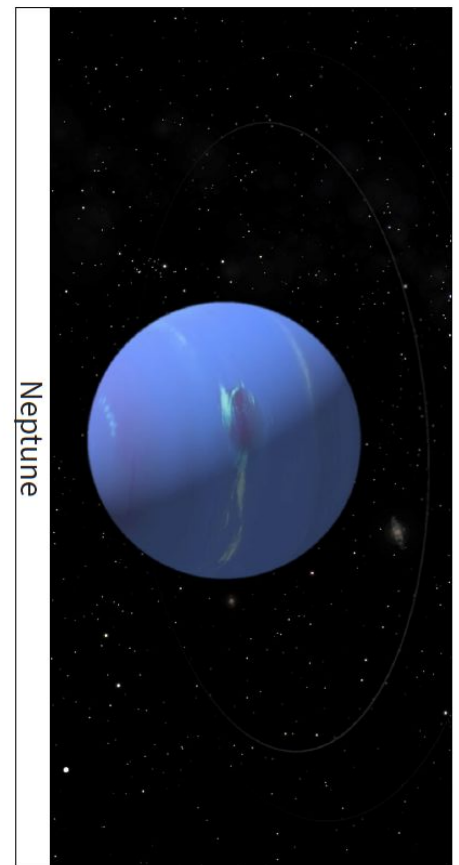
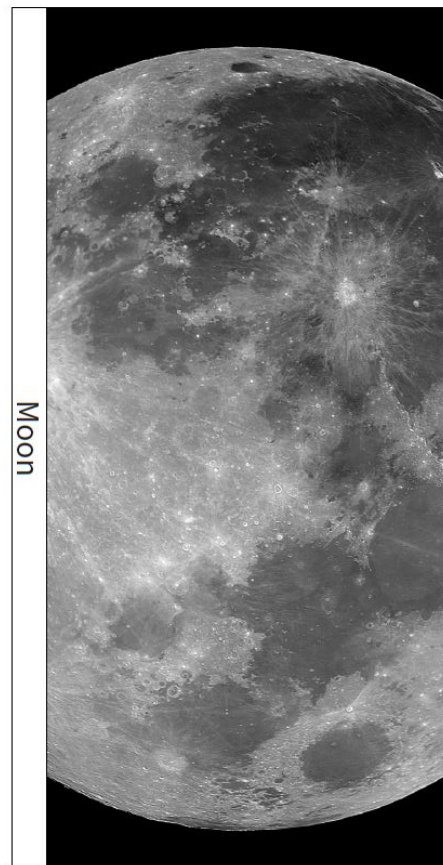
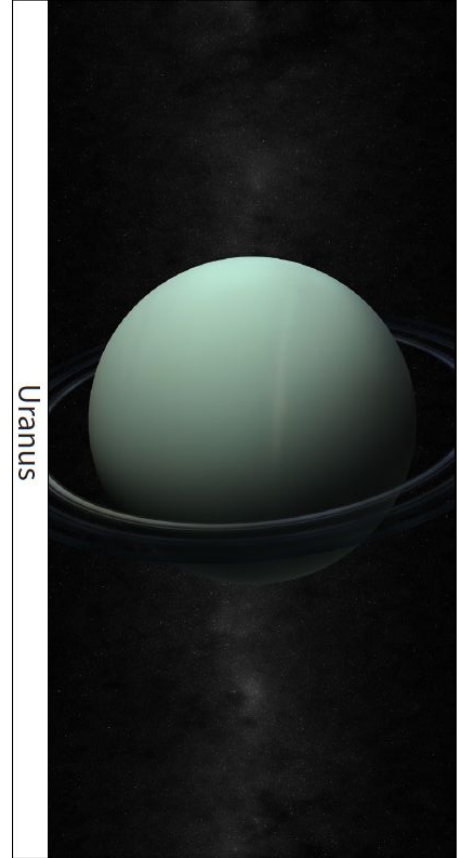
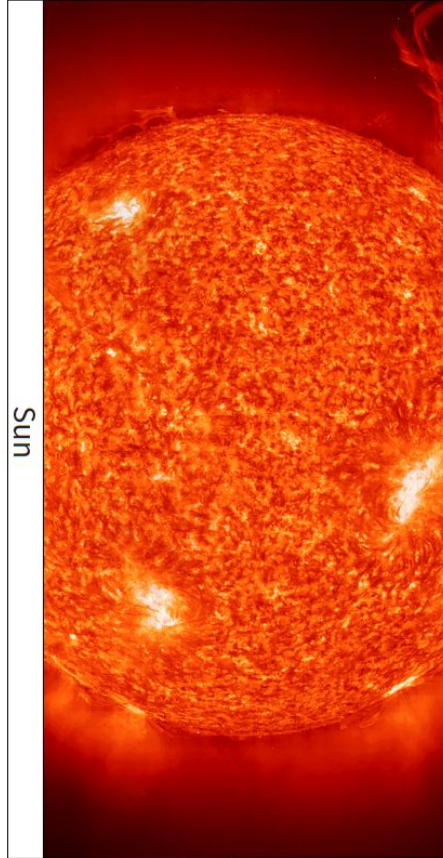
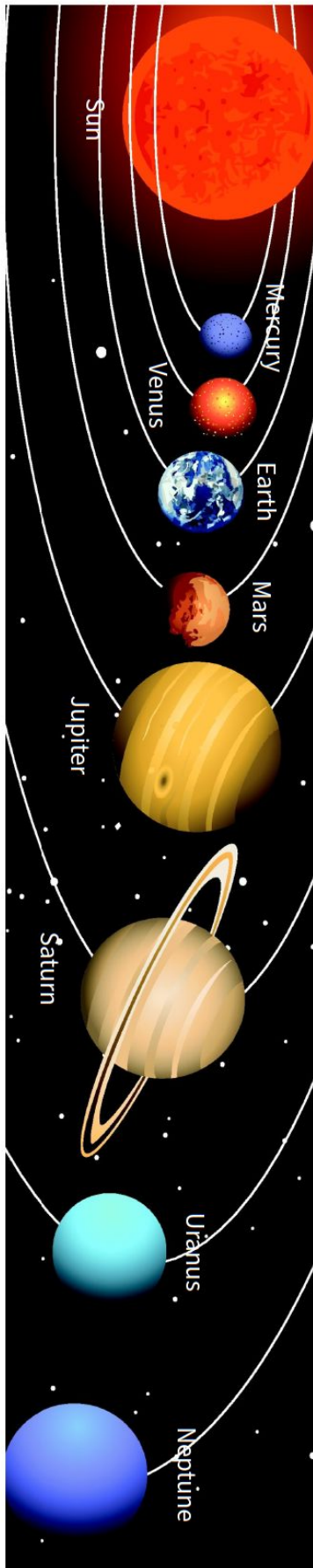
Saturn



Jupiter

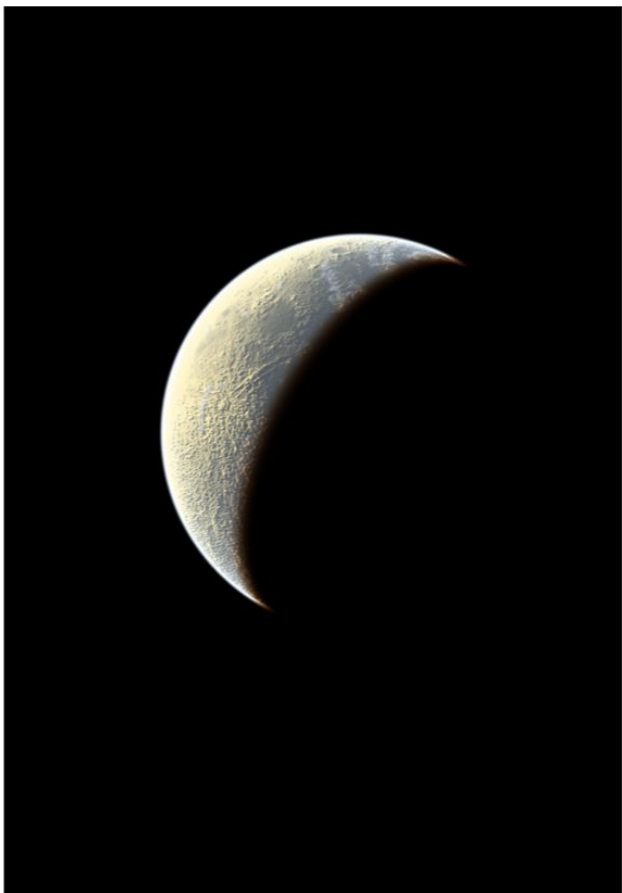


Mars





New Moon



Crescent Moon



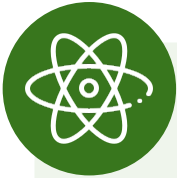
Half Moon



Full Moon

Name: _____

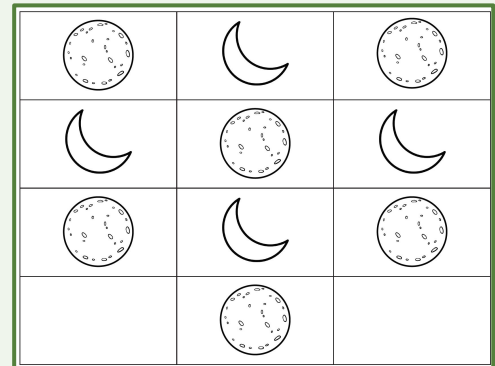
If you could visit the moon what would you do there?



STEM: Moon Sets

MATERIALS: [Moon Sets](#), crayons, child-safe scissors, paper

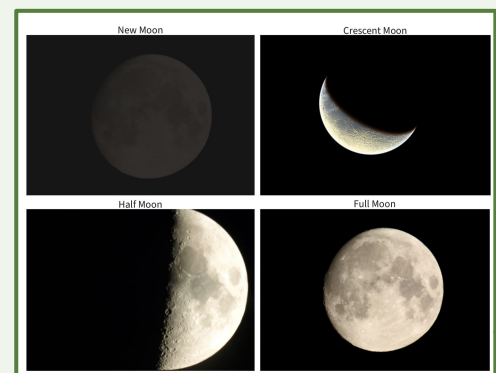
- Have your child count the moons and then color and cut them out.
- Put out 4 moons and ask your child to count and then find the corresponding number card.
- Repeat several times with different amounts.
- *Optional - your child can pick a number and make a set of moons, Repeat several times.*



Independent Learning: Making the Moon

MATERIALS: [Moon](#), watercolor palette, foil or paper, child-safe scissors, *optional - string, a stick or hanger*

- Talk about the phases of the moon. Say, **Let's make the moon using foil (or paper). Which phase do you want to make?** Encourage your child to add craters using paint.
- Say, **Tell me about your moon. Which phase did you pick?**
- *Optional - Add stars using foil. Hang the moon and stars from a stick or hanger using string.*





Literacy: Empathy

MATERIALS: paper, crayons

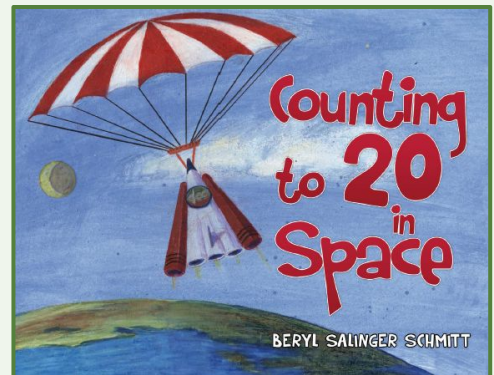
- One way we can help when there is a problem is to show empathy. Empathy means that you try to understand how someone else feels.
- **Can you write and draw about a time that you helped someone?** If they cannot think of a time, you can suggest a time you noticed. Maybe they helped a neighbor who was carrying a lot of things or shared something with a sibling who was sad.
- Talk with them about their drawing and explain how they showed empathy by understanding how the other person felt.



Read: *Counting to 20 in Space*

MATERIALS: [*Counting to 20 in Space*](#)

- Encourage your child to name the numbers 1-10 while reading.
- Ask, **Tell me two things from the story. Which one happened first?**





Let's Move: Blast Off to the Number

MATERIALS: number cards from 0-10, *optional - music*

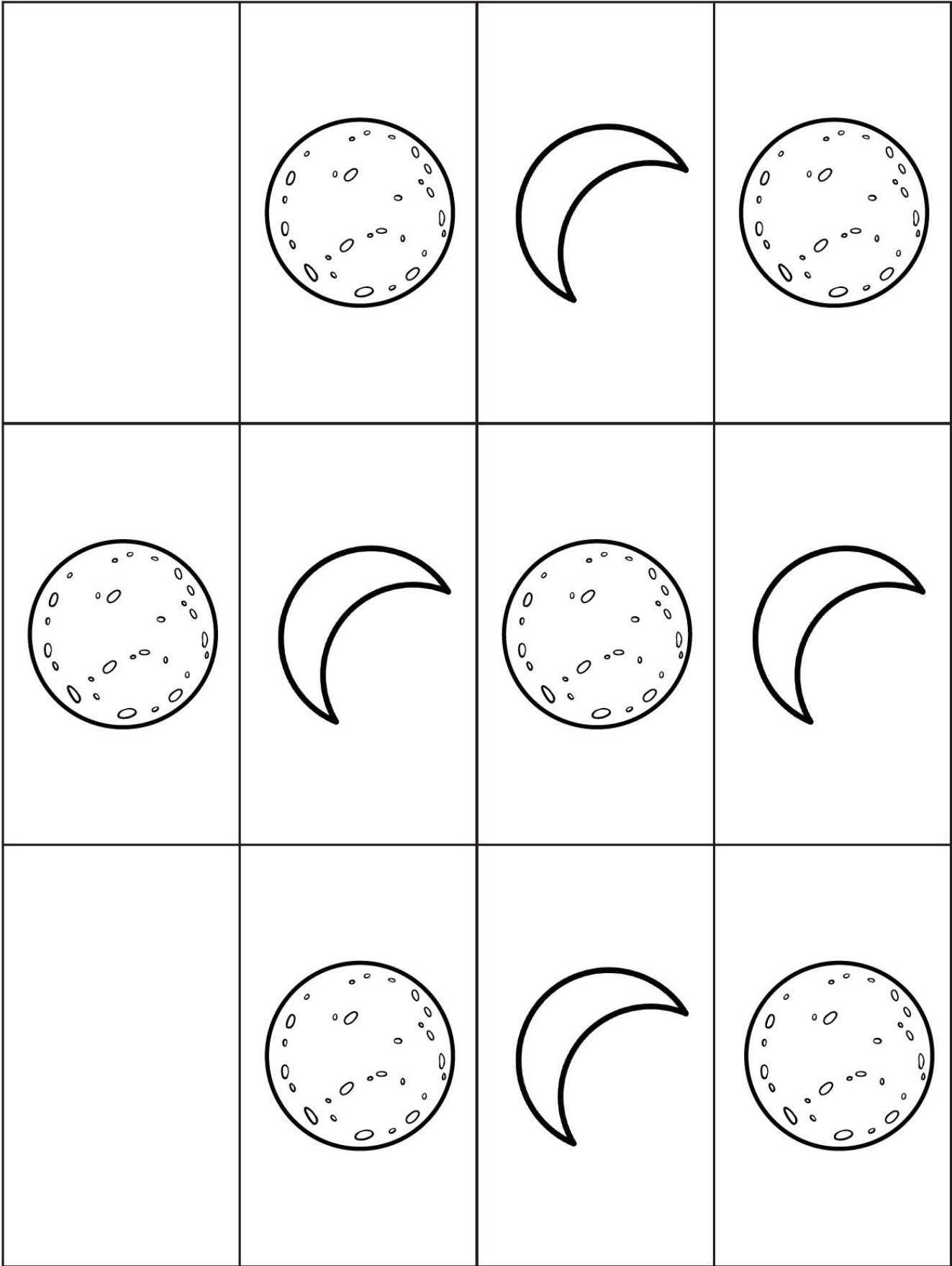
- Place the number cards randomly around the room.
- With your child, identify numbers 0-10. Say, **I will say a number and you will find it. Pretend to be a rocketship while you fly around the room!** Demonstrate.
- Take turns saying different numbers for you to find together.

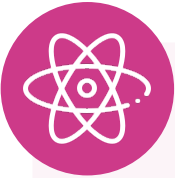


Learning Together: Our Solution

MATERIALS: paper, crayons

- Talk with your child about a problem, like, your neighbor needs help getting groceries, you are not sure what to make for dinner, or some people do not want to do their chores.
- Ask, **Let's think of a solution together. How can we solve this problem?** Talk together about a solution which your child can write and draw about before trying it out.





STEM: Day and Night

MATERIALS: flashlight, ball

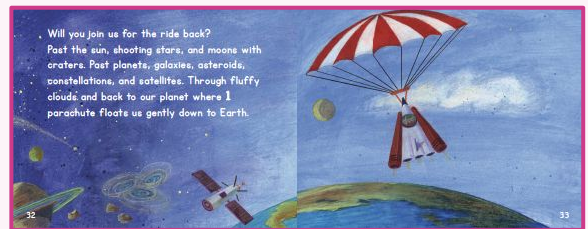
- Pretend the ball is Earth and the light is the sun! Have your child hold the light. **The sun shines on Earth in the day.** Talk about things you do during the day.
- Turn the ball a little. Say, **Now the light is on a different part of Earth. That's what happens at night.** Together, talk about things you do at night.



Independent Learning: Parachute

MATERIALS: [*Counting to 20 in Space*](#), lightweight object that will not break when dropped, like a toy or ball, paper, crayons, cloth like a bandana, scarf, lightweight towel, mask

- Show pp.32-33 and say, **A parachute helps astronauts float slowly and safely down. The air pushes the parachute up, so it falls more slowly.**
- With your child, drop a toy and observe how fast it falls.
- Have your child design and draw a parachute.
- With your child, use a cloth to make a parachute based on their design. Drop the toy again.
- Together, talk about how the toy fell with and without the parachute.





Literacy: Blending Sounds

- **Let's blend words! I will blend the beginning sound and the rest of this word. C-an, c-an.** Repeat faster as you blend the two parts together. **C-an, can. You try, c-an, can!**
- **Your turn!** Have your child blend other words ending in -an, m-an (man), t-an (dan), and f-an (fan).



Journal Prompt: The Sky

MATERIALS: crayons, pencil, The Sky Journal Page

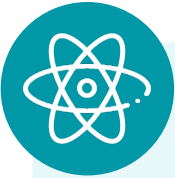
- With your child, look at pictures of the sky during different times of day (morning, sunset, night). Ask your child to describe what they see.
- Have your child write and draw about the sky.
- Ask, **What is your favorite time of the day? What does the sky look like at that time?**

Name: _____

Draw a picture of what the sky looks like during your favorite time of the day.

Name: _____

Draw a picture of what the sky looks like during
your favorite time of the day.



STEM: How Many Objects?

MATERIALS: Household objects like paper clips or pebbles or ripped up pieces of paper (20)

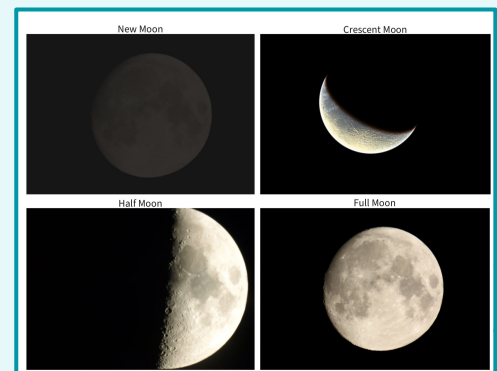
- Show 6 paper clips. Ask, **How many are there?** Count together as you point to each paper clip. Repeat the total. **There are 6 paper clips!**
- Then, ask your child to make a set with 6 paper clips.
- Repeat 2-3 more times for numbers between 0 and 10. Your child can also show you a set and ask you to count.



Independent Learning: Moon Craters

MATERIALS: [Moon](#), paper, crayons, balls or balled-up socks of different sizes, a deep container, dirt or coffee grounds

- Place dirt in a deep container.
- Together, look at pictures of craters on the moon. Say, **craters are made when large rocks, like meteors, hit the moon.**
- With your child, make craters by dropping balls in the dirt. Talk about what happens when you drop different size balls. Explore dropping them from different heights.
- Ask, **What did you notice about the craters? How did you make the largest crater?**





Literacy: We Are Blending Sounds

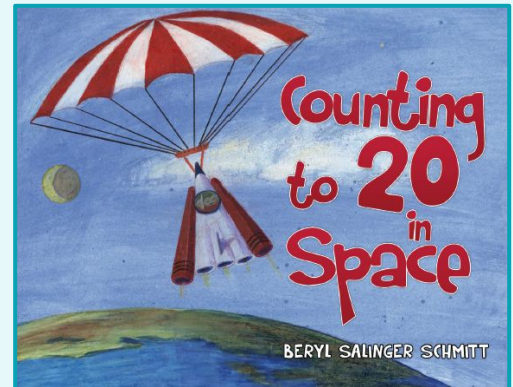
- **Let's blend words!** I will blend the beginning sound and the rest of this word. **P-ig, p-ig.** Repeat faster as you blend the two parts together. **P-ig, pig. You try, p-ig, pig!**
- **Your turn!** Have your child blend other words ending in -ig (wig), d-ig (dig), and b-ig (big).



Read: *Counting to 20 in Space*

MATERIALS: [*Counting to 20 in Space*](#)

- Have your child point out the numbers 1-10 as you read together.
- Ask, **What do you think it would be like to travel to space?**



Week 2

PK3 Unit 10 Week 2 Overview

Blast Off to Space

This week your child will:

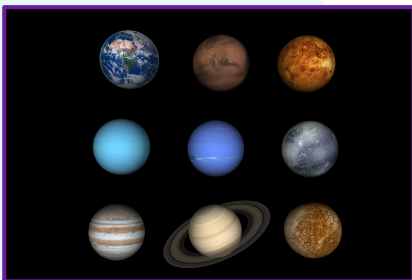
Make the solar system. Your child will blend parts of words, learn about using their words to solve a problem, and count and make sets with up to 10 objects. Help your child to use problem-solving strategies when they have a problem. Save your child's work, like the solar system, so that they can use it in Week 3.

Key Vocabulary



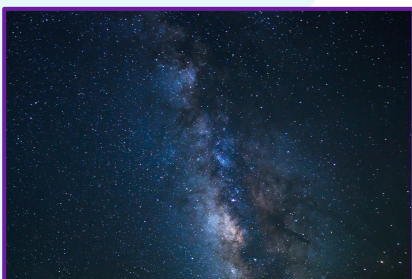
astronaut

someone who travels to and works in space



planet

a large round object in space that moves around a star, like the sun



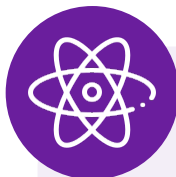
space

the area beyond the earth where the stars and planets are

Create Connections

This week, you will make the solar system with all of the planets, including planet Earth where we live. Before you begin the packet, write and draw about your favorite planet.

**Think
About It!**



STEM: Name the Number (6-10)

MATERIALS: paper, crayons

- Help your child make two sets of number cards 6-10. Give your child one set and keep the other.
- Show a number card. Ask your child to say the number and find the same number card from their set.
- Switch roles. Have your child show the card. You say the number and find it.
- If your child can identify 6-10, add a few higher numbers to the set.

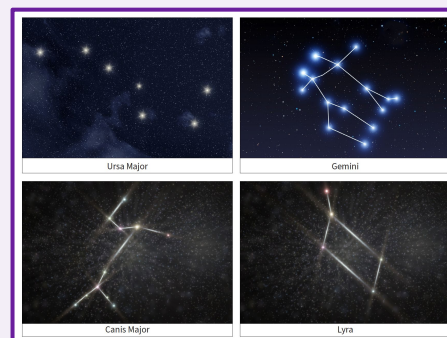
Save the number cards for later in the unit.



Independent Learning: Designs in the Stars

MATERIALS: [Constellations](#), paper, watercolor palette, *optional - black paper, glue, balled pieces of foil, pom-poms, or cotton balls, etc.*

- Look at the pictures of constellations with your child and talk about the patterns. **Constellations are groups of stars that make a pattern and have a name.**
- Have your child make a constellation by painting stars to make a pattern or design.
- *Optional - your child can add the foil, pom-poms or other items for stars.*





Literacy: Use Your Words

- Sometimes we get angry, frustrated, or even cry. If we need help or need to talk to someone, we have to use words so they can understand and help us solve the problem.
- Talk about words your child could use to solve a problem, such as please help me, I do not like that, or please stop.

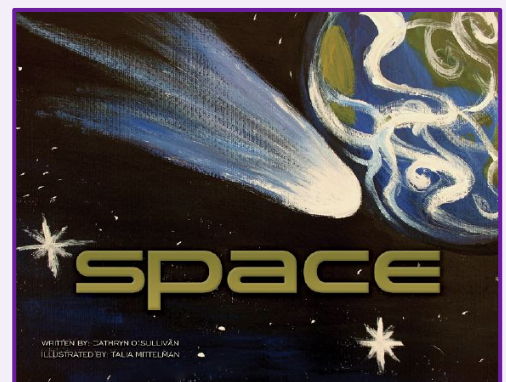


Read: *Space*

MATERIALS: [*Space*](#)

- Read the book with your child.
- Ask, **Tell me 2 things you remember in the Milky Way Galaxy.** If they need help, refer to the book.

You can also access a pre-recorded reading of this book on the Spakler app in the “Tips for Adults” section, Blast Off Into Space!



Canis Major



Ursa Major

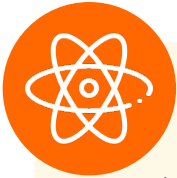


Lyra



Gemini

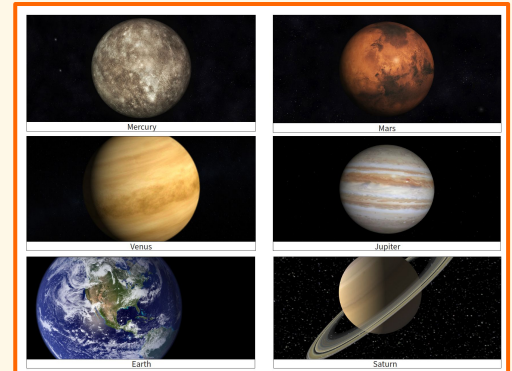




STEM: Solar System Part 1

MATERIALS: [Solar System](#), paper (can be scrap paper), watercolor palette or playdough or [Playdough Recipe](#), *optional - foil or other decorative items to make additional features like stars*

- With your child talk about the solar system and planets. Look at the pictures together.
- Together, make the Sun and planets by crumpling paper and painting each one. Or, you can use playdough!



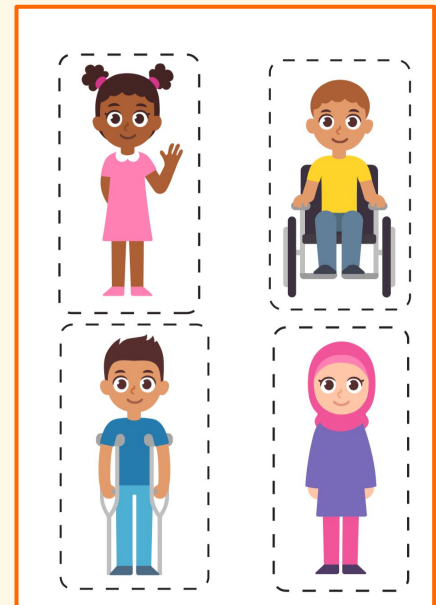
Allow time for the solar system to dry and save for Day 9



Independent Learning: My Friend Won't Share

MATERIALS: [Friends Puppets](#), crayons, child-safe scissors, sticks or craft sticks or spoons with long handles, etc., tape, small toy, *optional - glue the puppets onto cardboard before cutting them out*

- Talk with your child about what to do if a friend won't share their toy. They can wait for a turn, ask their friend to trade toys, or play with something else until their friend has finished playing.
- Have your child cut the puppets out. Tape the puppets to sticks and allow your child to role play what to do if a friend won't share.
- Ask, **What did your puppets decide to do when a friend wouldn't share?**
- Keep the puppets for use throughout the unit.





Literacy: Our Story

MATERIALS: paper, crayons

- Tell a simple example story with two events. Give an example like, **One time I (or we)...and then we...**
- If your child needs help, say, **Tell me about the time when we...** And, **Tell me two things that happened.**
- **That was a good story!**



Journal Prompt: Astronomer

MATERIALS: crayons, pencil, Astronomer Journal Page

- Talk with your child about astronomers and their jobs. **Astronomers are scientists who study things in space, like stars and planets.**
- Have your child write and draw about whether or not they would like to be an astronomer.

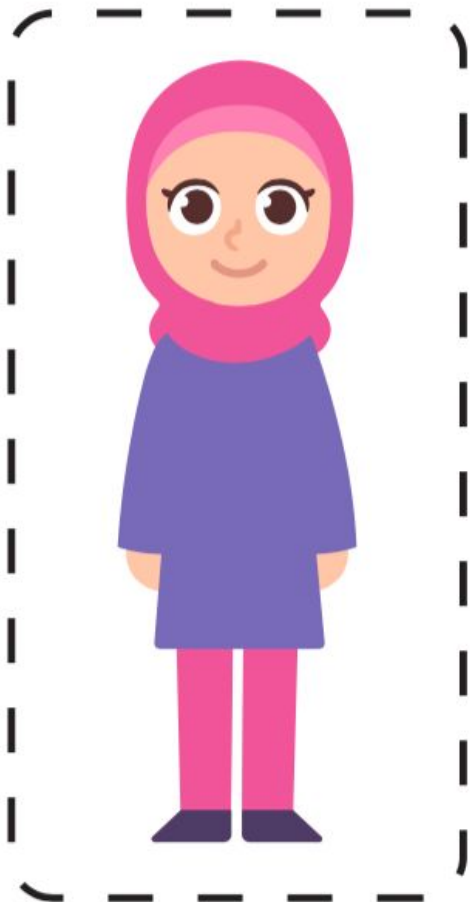
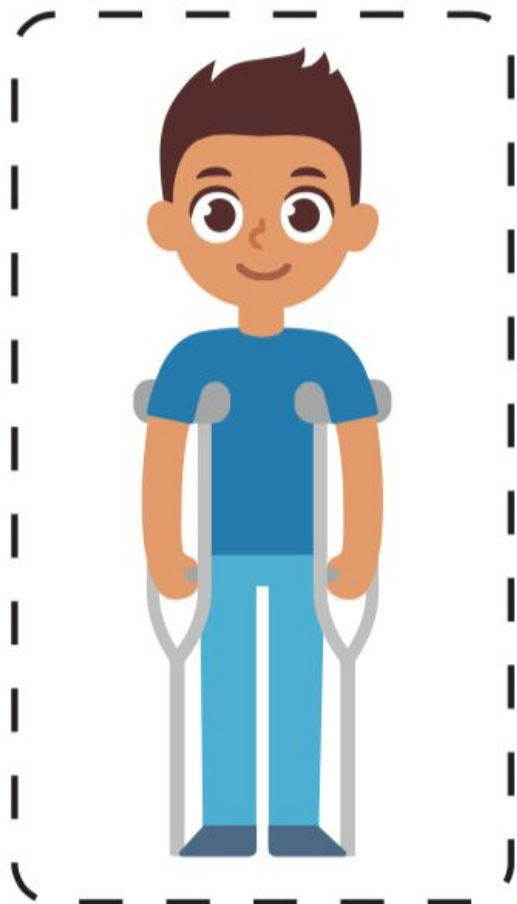
Name: _____
Would you like to be an astronomer? Why or why not?

PLAYDOUGH RECIPE

1 cup of flour
2 teaspoons cream of tartar
1/3 cup of salt
1 cup of water
1 tablespoon of vegetable oil
food coloring of your choice

1. Place flour, cream of tartar, and salt in a saucepan.
2. Add water and vegetable oil to the saucepan. Over medium/low heat, stir the mixture.
3. Before the mixture starts getting thick, add the food coloring.
4. Keep stirring and scraping the mixture from the bottom of the saucepan.
5. Allow the dough to cool before play. Store in an airtight container.





Name: _____

Would you like to be an astronomer? Why or why not?



STEM: Make a Set

MATERIALS: 10 of the same objects, such as 10 pennies or 10 crayons

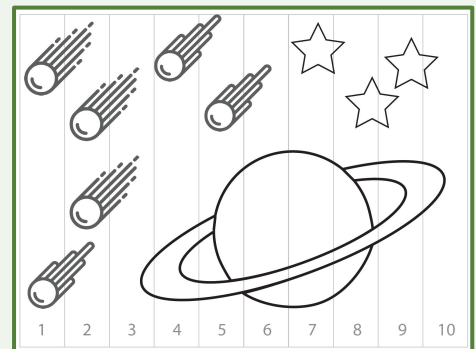
- **Let's make a set or a group of things. I will tell you how many objects you need to make your set.**
- Give different amounts from 1-10, having your child count out items to make sets.
- Switch roles so that your child can give you numbers to make sets.



Independent Learning: Space Puzzle

MATERIALS: [Space Puzzle](#), crayons, child-safe scissors,
optional - glue the puzzle onto cardboard before coloring and cutting out

- With your child, review the numbers at the bottom of the puzzle.
- Have them color the puzzle, cut it out, and then put the pieces in order from 1-10.
- Ask them to point to different numbers for practice.



Wednesday

PK3 Unit 10 Week 2 Day 8



Literacy: Let's Talk About Space

- With your child, discuss what they are learning about space.
- **What is in space?**
- **What do you think it would be like to live on the moon?**
- **Why can't people live in space?**
- Practice having a back and forth conversation.



Read: *Space*

MATERIALS: [*Space*](#)

- Read with your child.
- Ask, **What else do you think the museum might have?**
- Look up more information about air and space museums and planetariums in a book or on a phone or tablet.





Let's Move: Count and Toss

MATERIALS: number cards 0-10, 10 balls (balled up paper or socks), container

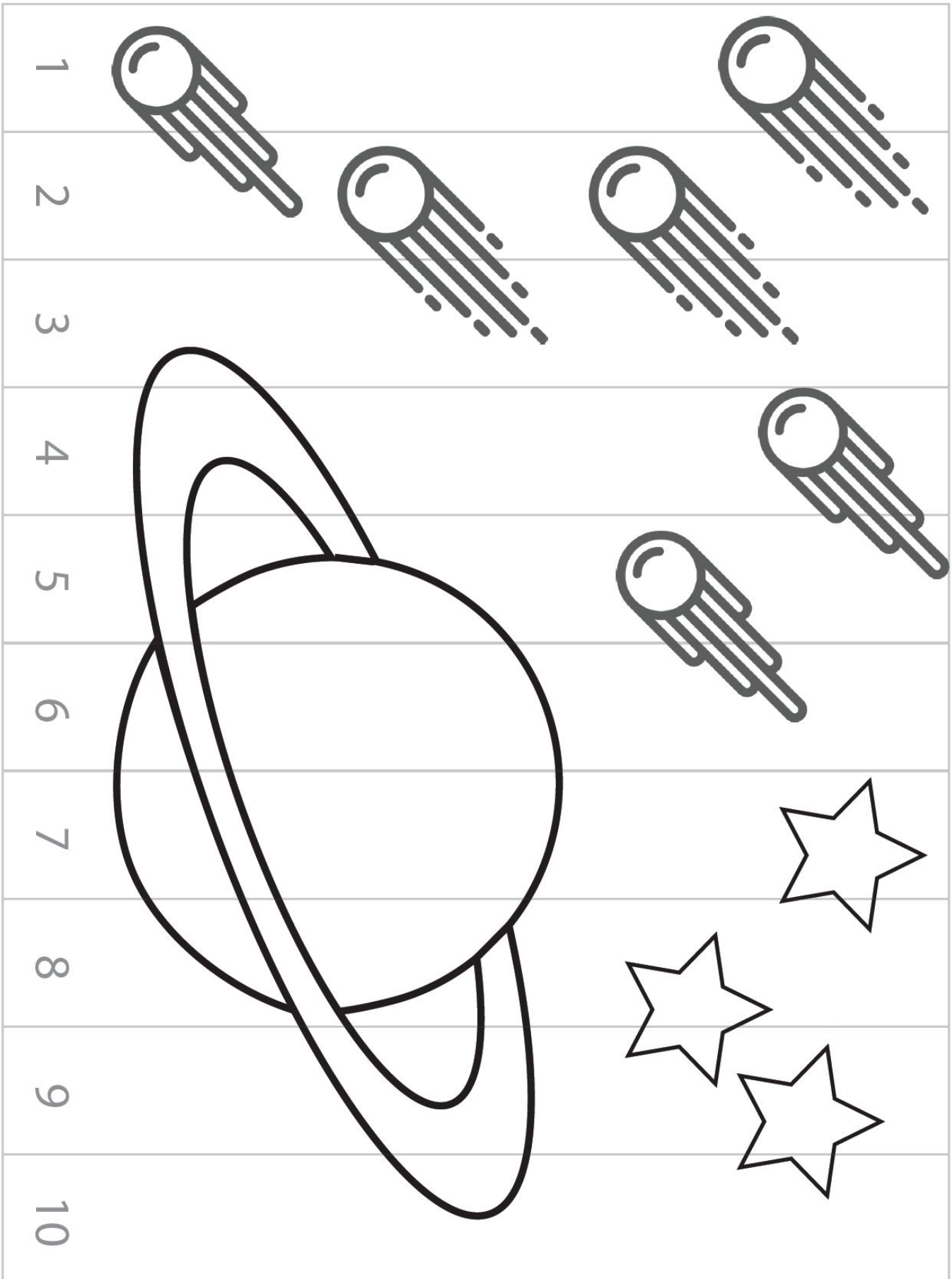
- Have your child pick a number card and say the number. Have them toss that many balls into the container.
- Repeat several times, taking turns.
- *Optional - pick a number card and throw a ball back and forth for that number of times while counting.*



Learning Together: Space Camp

MATERIALS: items for a pretend camp, e.g., sheets or towels to make a tent, astronaut clothing, paper towel rolls to make telescopes, snacks

- **Let's pretend that we have just landed on a new planet and we have to set up a camp. What should we use to build our tent?**
- Make believe together! Have fun building a tent, exploring a new planet, and making a space meal together.



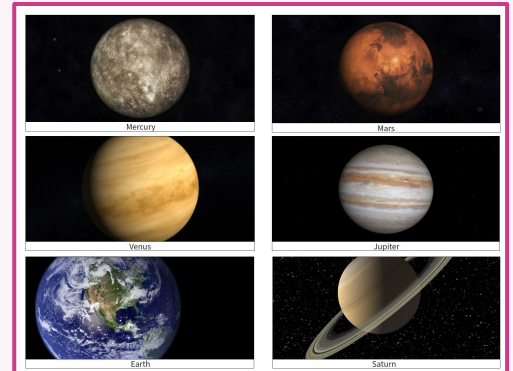


STEM: Solar System Part 2

MATERIALS: [Solar System](#), planets and sun made on Day 7, cardboard or hanger, string, tape

- Talk with your child about the planets they made and how they can put them together.
- Help your child tie a string around each planet and attach the string to the cardboard or hanger. Then hang the solar system up to enjoy!

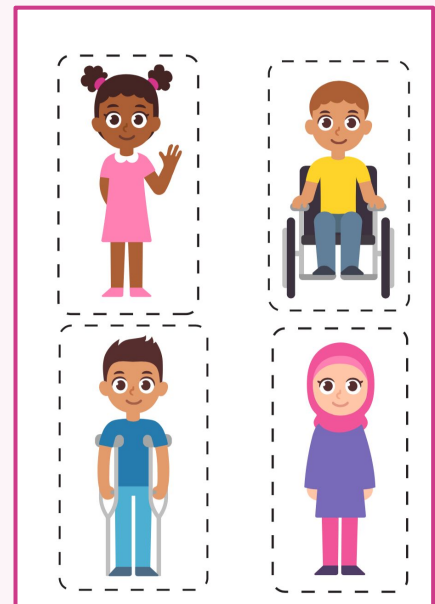
Save the solar system for when you play together in the Air and Space Museum in Week 3.



Independent Learning: Including Others

MATERIALS: [Friends Puppets](#) made on Day 7

- Empathy is understanding how others feel. One way to show empathy is to let others play with us if they feel alone and left out. You can say, do you want to play with me?
- Have your child use the puppets to act out inviting others to play.
- Ask, **How did your friend feel when you asked them to play with you?**





Literacy: Act It Out

- **I will say a word, then let's act out what the word means.**
- Use theme-related words, such as astronaut (pretend to put on your space suit), star (twinkle like a star with your fingers and point to the sky), rocket (pretend to blast off).
- Switch roles so your child can suggest a word.



Journal Prompt: Planet

MATERIALS: crayons, pencil, [Solar System](#), Planet Journal Page

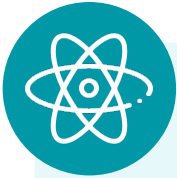
- With your child, look at the Solar System pictures and talk about the different planets. You can look up more information using a phone or tablet.
- Have your child write and draw about a planet they would like to live on.
- After, ask, **Which planet would you like to live on? Why?**

Name: _____

Write and draw about the planet you would live on if you could live on a different planet.

Name: _____

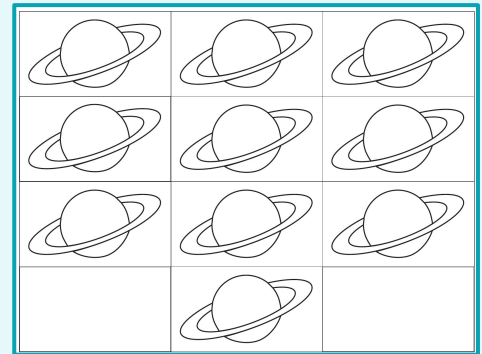
Write and draw about the planet you would live on
if you could live on a different planet.



STEM: Planet Sets

MATERIALS: [Planet Sets](#), crayons, child-safe scissors, number cards from 0-10

- Have your child count the planets and then color and cut them out.
- Put out 5 planets and ask your child to count them and then find the corresponding number card (5).
- Repeat several times with different amounts.
- *Optional - your child can pick a number and make a set of planets. Repeat several times.*



Keep the number cards for use throughout the unit.



Independent Learning: My Planet

MATERIALS: [Solar System](#), paper, watercolor palette or crayons, playdough or [Playdough Recipe](#)

- Talk with your child about planet features. Saturn has rings of ice and rock. Jupiter has many moons. **What is special about our planet Earth (it has plants and animals, water we can drink, air for us to breathe).**
- Allow your child to make a planet out of playdough and paint it.
- Ask, **Tell me about your planet! What special things does it have? Is there anything living on your planet?**

PLAYDOUGH RECIPE

1 cup of flour
2 teaspoons cream of tartar
1/3 cup of salt
1 cup of water
1 tablespoon of vegetable oil
food coloring of your choice

1. Place flour, cream of tartar, and salt in a saucepan.
2. Add water and vegetable oil to the saucepan. Over medium/low heat, stir the mixture.
3. Before the mixture starts getting thick, add the food coloring.
4. Keep stirring and scraping the mixture from the bottom of the saucepan.
5. Allow the dough to cool before play. Store in an airtight container.



Playdough Recipe (FE)



Literacy: I Can Blend Sounds

- **Let's blend words!** I will blend the beginning sound and the rest of this word. H-at, h-at. Repeat faster as you blend the two parts together. H-at, hat. **You try, h-at, hat!**
- **Your turn!** Have your child try to blend c-up (cup), j-ump (jump), and p-et (pet).

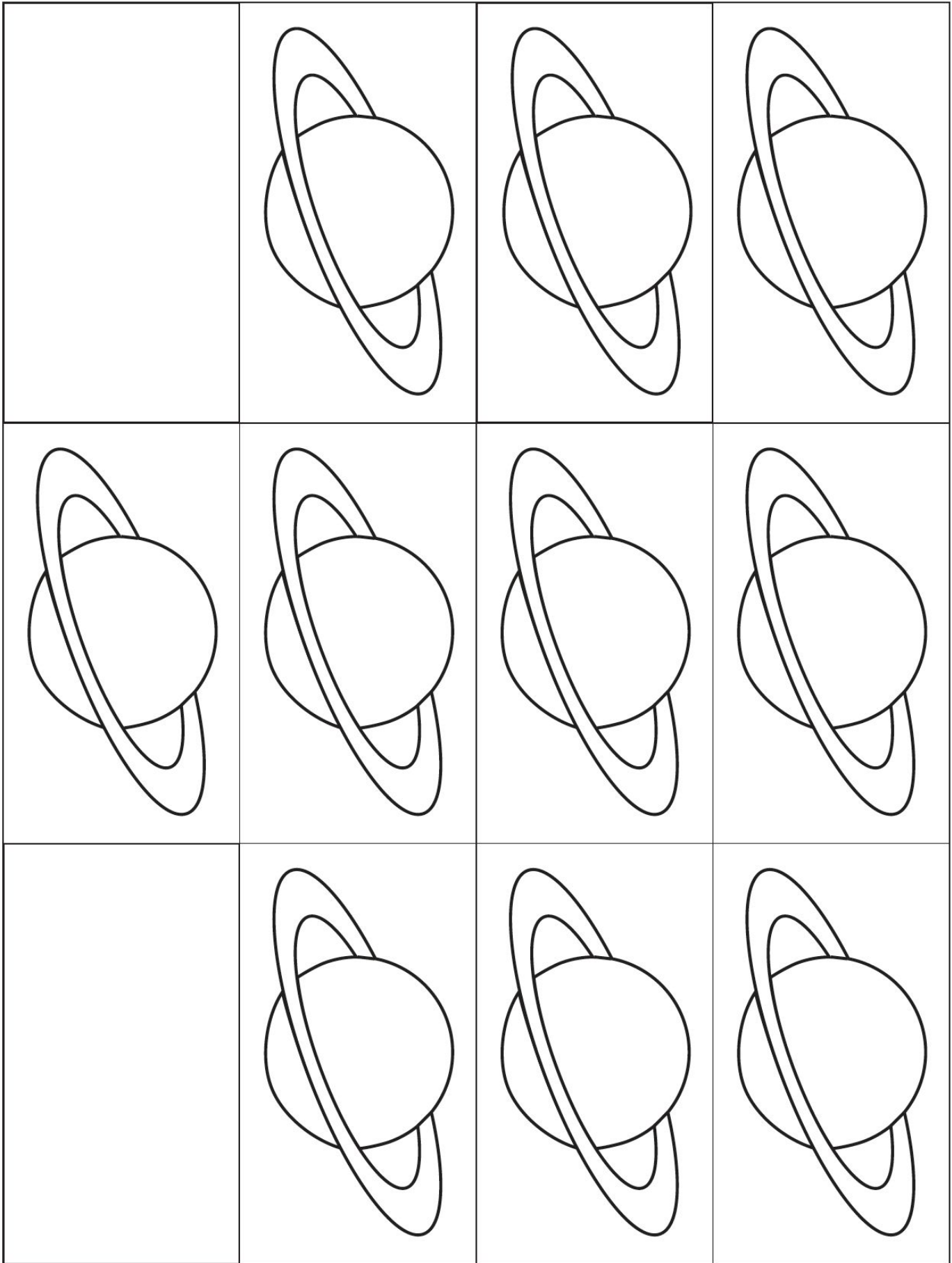


Read: *Space*

MATERIALS: [*Space*](#)

- Read the book with your child.
- Ask, **What would you like to see if you looked through a telescope?**





Week 3

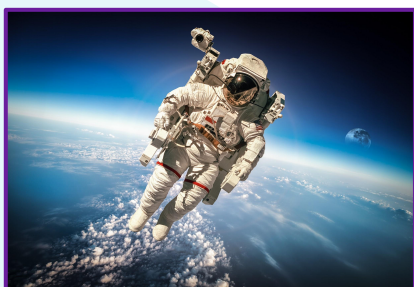
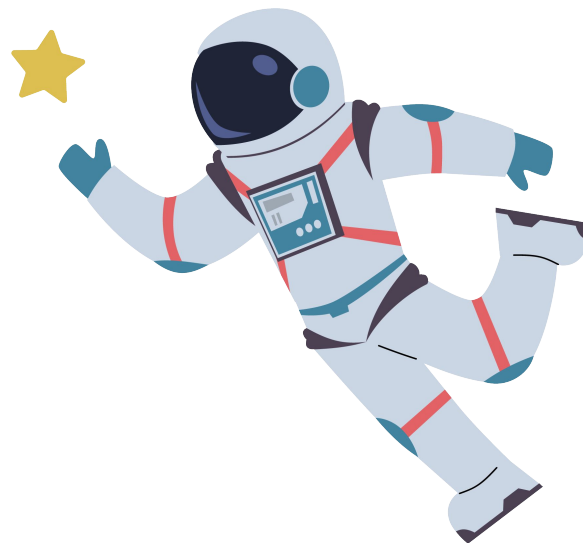
PK3 Unit 10 Week 3 Overview

All About Astronauts

This week your child will:

Build the International Space Station and explore gravity. They will make a story with two events, blend parts of words, learn about standing up for themselves and others, learn about astronauts, design a spacesuit, and search for numbers. Help your child understand that people wear special clothes to do their jobs by pointing out workers' uniforms.

Key Vocabulary



astronaut

someone who travels to and works in space

gravity

the force that causes something to fall to the ground or to be attracted to another planet

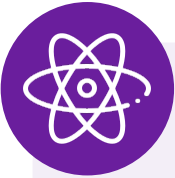
space shuttle

a vehicle that is used to go into space and return to Earth

Create Connections

This week, you will learn about astronauts who travel to space. Before you begin the packet, write and draw about where you would like to travel.

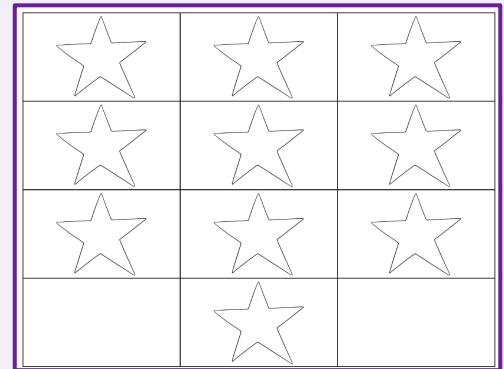
**Think
About It!**



STEM: Star Sets

MATERIALS: [Star Sets](#), crayons, child-safe scissors, number cards from 0-10

- Have your child count the stars and then color and cut them out.
- Put out 8 stars and ask your child to count them and find the corresponding number card (8).
- Repeat several times with different amounts.
- *Optional - your child can pick a number and make a set of stars. Repeat several times.*



Keep the number cards for use throughout the unit.



Independent Learning: Painting Myself in Space

MATERIALS: watercolor palette or crayons, paper

- Talk with your child about what they would do if they went to space.
- Have your child paint a picture of themselves in space.
- Ask, **Tell me about your painting! What are you doing in space?**



Literacy: What's Your Story?

MATERIALS: paper, crayons

- Have your child write a story about something that happened this week. Encourage them to include two events in their story.
- Ask, **Tell me your story please! You can even act it out.**

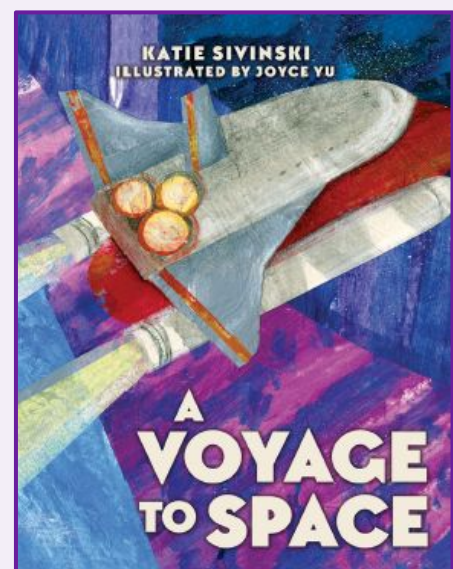


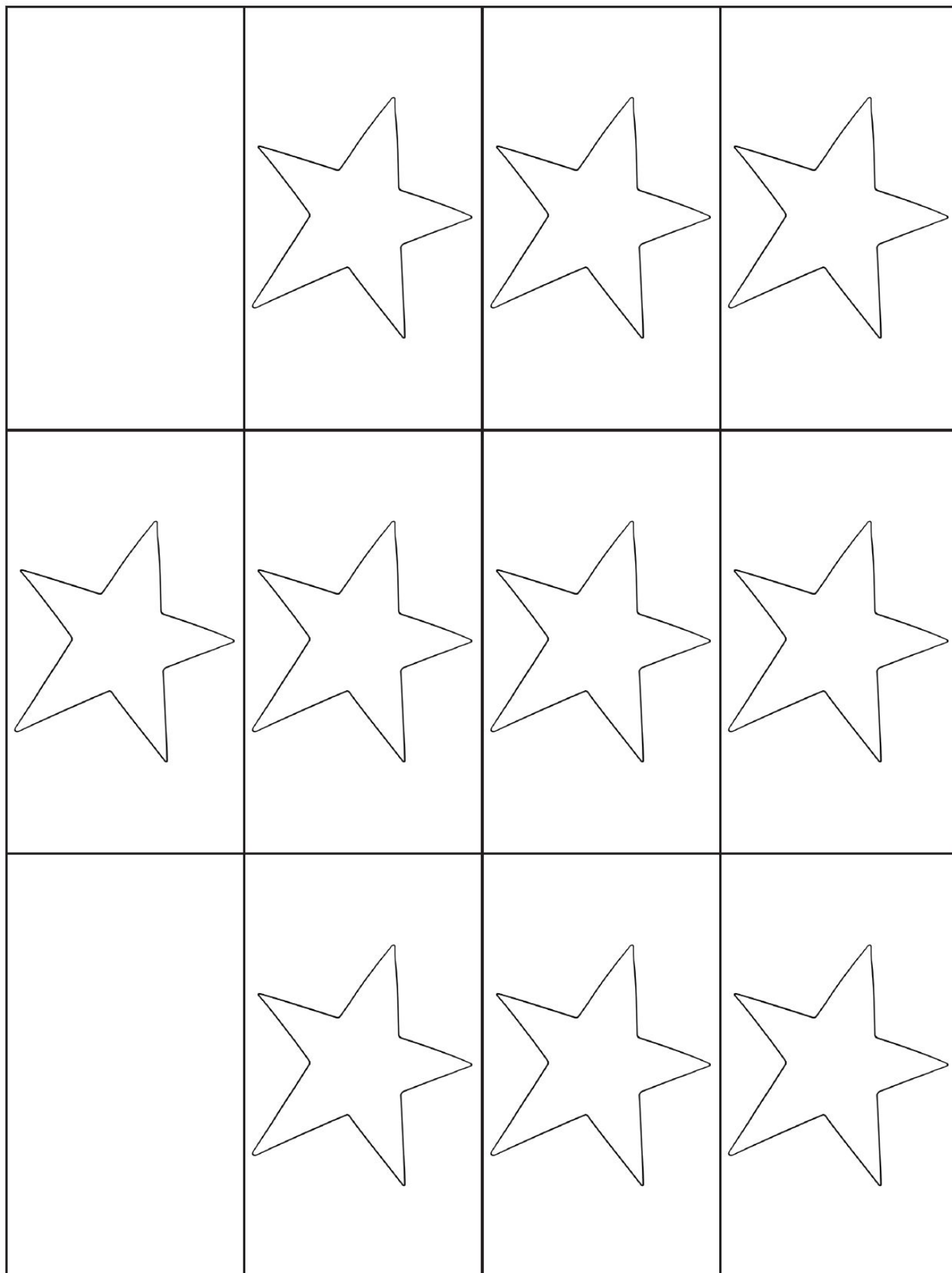
Read: *A Voyage to Space*

MATERIALS: [*A Voyage to Space*](#)

- Read the book together. Point to and say the numbers together on p. 13 as they blast off!
- Ask, **Would you like to go to space? Why or why not?**

You can also access a pre-recorded reading of this book on the Spakler app in the “Tips for Adults” section, Blast Off Into Space!







STEM: Building the International Space Station

MATERIALS: [International Space Station](#), paper, crayons, recyclable items like paper towel rolls, small containers, or playdough or [Playdough Recipe](#)

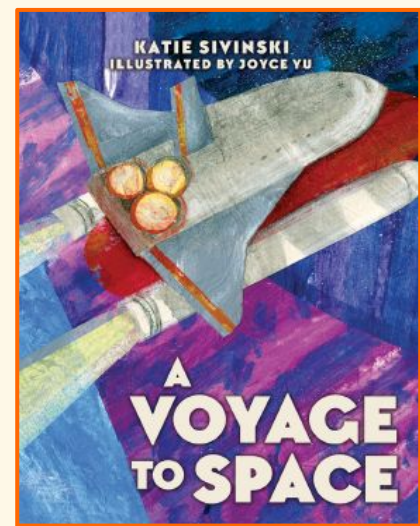
- Talk with your child about the International Space Station and a satellite.
- **The International Space Station is where astronauts live in space. Satellites send signals to Earth so we can do things like watch TV and use the internet.**
- Together, draw a design for a satellite and build it with the materials.



Independent Learning: If I Were an Astronaut

MATERIALS: paper, crayons, [A Voyage to Space](#)

- Ask your child what they would do if they were an astronaut. You can refer to the book. Have your child write and draw about it.
- After, ask, **What you would do if you were an astronaut?**





Literacy: Let's Blend Sounds

- **Let's blend words!** I will blend the beginning sound and the rest of this word. P-ig, p-ig. Repeat faster as you blend the two parts together. **P-ig, pig. You try, p-ig, pig!**
- **Your turn!** Have your child try to blend r-un (run), h-op (hop), and c-at (cat).



Journal Prompt: Space

MATERIALS: crayons, pencil, Space Journal Page, [A Voyage to Space](#)

- Talk with your child about what it would be like to travel to space in a space shuttle. You can refer to *A Voyage to Space*.
- Have your child write and draw about it.
- Say, **Tell me about your trip to space in a space shuttle! What did you do there?**

Name: _____

Write and draw about your trip to space in a space shuttle.



PK3 Blast Off Into Space

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International Space Station (FE)

Name: _____

Write and draw about your trip to space in a space shuttle.



STEM: Find the Number Cards

MATERIALS: number cards 0-10, scrap paper or newspaper, container, *optional* - tongs, a clothespin, or a large spoon

- **Let's look for numbers!** Have your child tear paper into small pieces and place them in the container. Hide the number cards in the container, naming them as they go in.
- Allow your child to use the tongs, a clothespin, or spoon to find the number cards, naming them as they find them.
- *Optional* - your child can write the numbers as they find them or you can include number cards for 11-15 for a challenge.



Independent Learning: Tiny Stars Painting

MATERIALS: paper, watercolor palette, [*A Voyage to Space*](#), tray or newspaper for the paper

- Look at p. 21 of *A Voyage to Space*. Talk with your child about the illustration and how the tiny white dots are stars in space.
- Allow your child to make a space painting by painting dark colors first then adding tiny white stars. Model how to use the paintbrush to make tiny white dots.



Wednesday

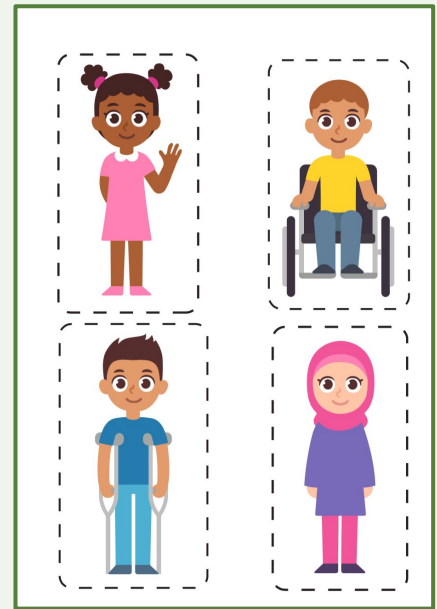
PK3 Unit 10 Week 3 Day 13



Literacy: Standing Up for Ourselves and Others

MATERIALS: paper, crayons, *optional* - [Friends Puppets made on Day 7](#)

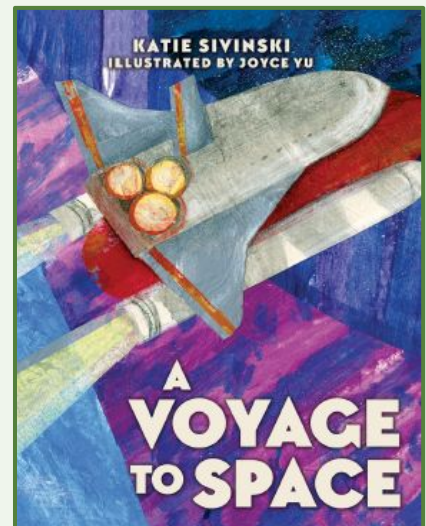
- If someone is bothering us or someone else, we can use words to stand up for ourselves and others. We can say, please stop that, no, or we do not like that. What else could you say?
- Your child can draw and color a picture of standing up for themselves or someone else or act it out with puppets.
- After, ask, **Tell me about your drawing! Who are you standing up for?**



Read: A Voyage to Space

MATERIALS: [A Voyage to Space](#)

- Read with your child. Allow your child to count on p. 13 as they blast off!
- Ask, **What do you think astronauts have to learn about before they go to space?**





Let's Move: Astronaut Training

MATERIALS: *optional - music, number cards 0-10*

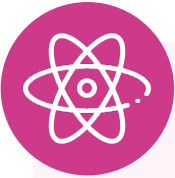
- Astronauts have to exercise and go through training before they go into space. Let's exercise like the astronauts.
- Take turns suggesting exercises like 5 jumping jacks, 3 squats, 10 twists, etc.
- *Optional - randomly pick number cards to decide how many exercises to do.*



Learning Together: At the Air and Space Museum

MATERIALS: display your child's work from weeks 1 and 2 like the constellations, moon, and Solar System, *optional - make additional items like a telescope from a paper towel roll*

- An Air and Space Museum has information and pictures about space. Sometimes they have telescopes to see the stars. They are like giant magnifying glasses that make the stars look bigger!
- Play make believe together! Pretend to be at the Air and Space Museum. You can pretend to be visitors at the museum or even astronomers studying space.



STEM: Gravity

MATERIALS: different objects to drop, e.g., ball, cup, lightweight cloth or scarf, feather, cotton ball, etc.

- Drop 2 objects at the same time. Ask, **What happened?**
- **They both fell because gravity pulled them to the ground. Gravity is the force that pulls things to the ground.**
- Together, explore gravity. Have your child drop 2 objects. Observe and talk about which hit the ground first or if they hit at the same time. Repeat the exploration using different objects and varying heights.

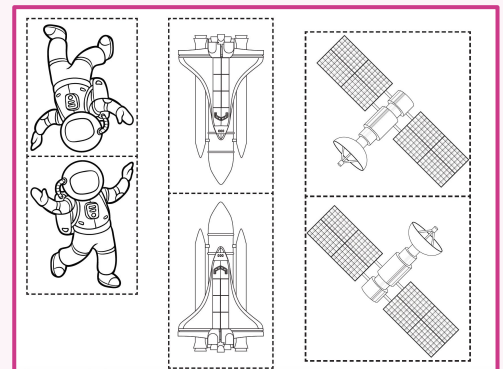
Tip: When two objects do not fall at the same rate it is because of the way the air affects their movements. On the moon with almost no gravity they would fall at the same time!



Independent Learning: Space Walk

MATERIALS: [Space Walk](#), crayons, child-safe scissors, [Counting to 20 in Space](#)

- Talk with your child about space walks. **Sometimes astronauts leave their shuttle to fix something like a satellite, or they do an experiment.** Refer to the space walk on pp. 20-21 of Counting to 20 in Space.
- Allow your child to color the pictures and cut them out. Fold them over so they can stand on their own. Your child can play and act out different scenes.
- Later, ask, **Tell me about your space walk. What did you do? What did you see?**

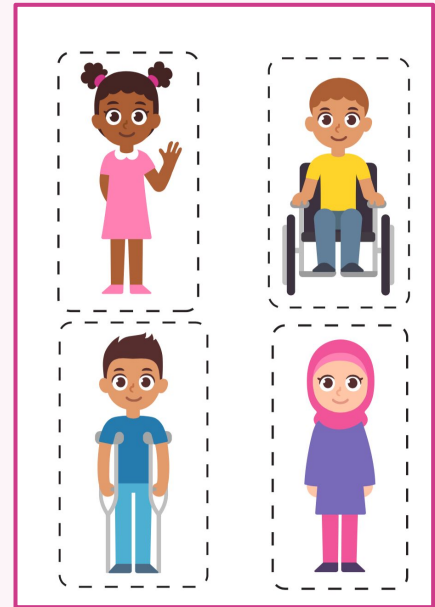




Literacy: Talk It Out

MATERIALS: [Friends Puppets](#) made on day 7

- Sometimes when we have a problem, we can talk it out. We can tell each other how we feel and then find a solution.
- Use the puppets to practice talking it out. Use common situations. Roleplay someone's feelings getting hurt or a disagreement between a sibling or friend.



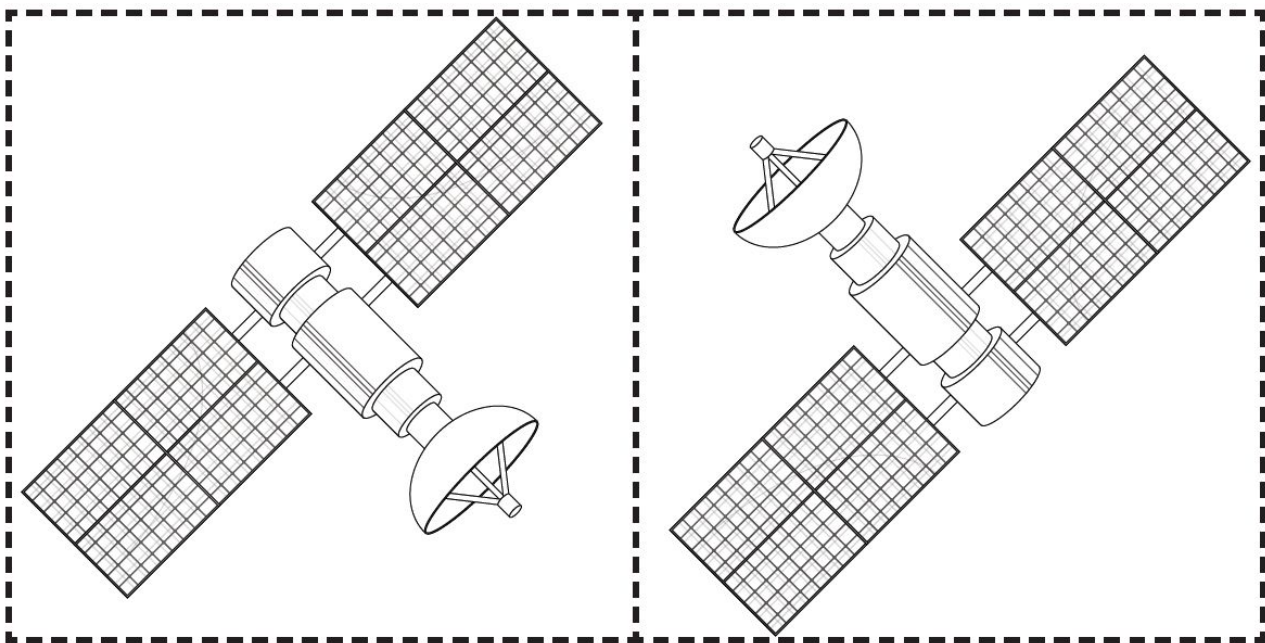
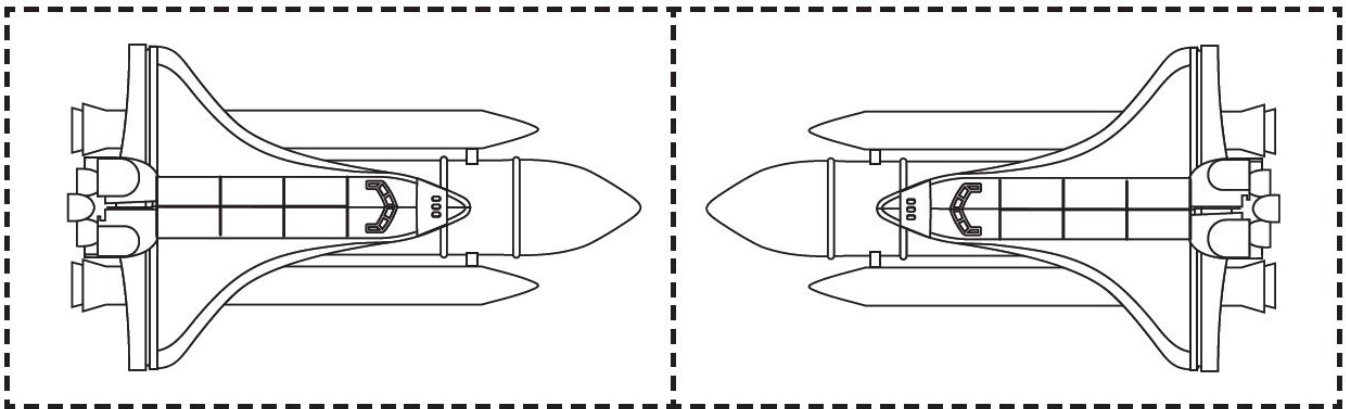
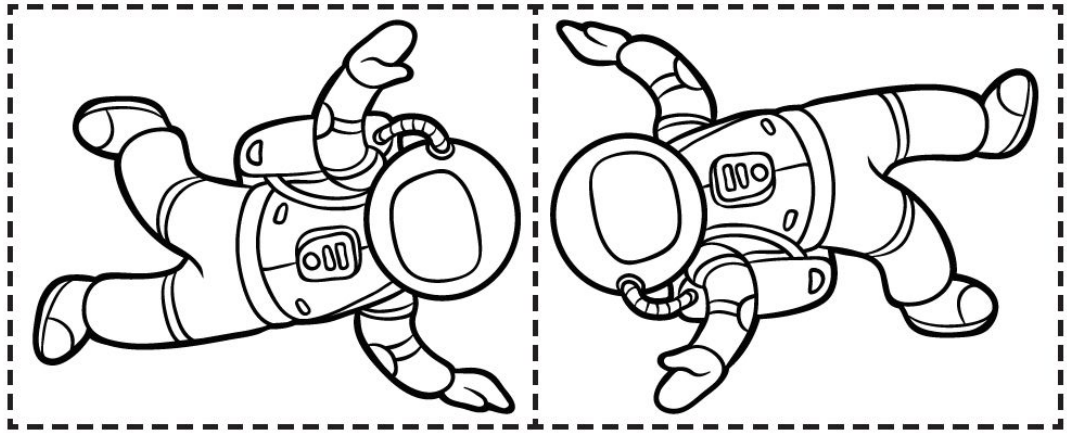
Journal Prompt: Astronaut

MATERIALS: crayons, pencil, Astronaut Journal Page

- Talk with your child about the work astronauts do. They travel to space to learn about things in space like planets and stars. They live at the space station to observe different things in space. They go on spacewalks.
- Have your child write and draw about being an astronaut.
- Ask, **Would you like to be an astronaut? Why or why not?**

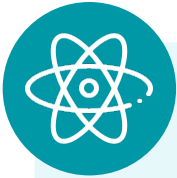
Name: _____

Would you like to be an astronaut? Why or why not?



Name: _____

Would you like to be an astronaut? Why or why not?



STEM: How Many Objects

MATERIALS: Household objects like paper clips or pebbles (20)

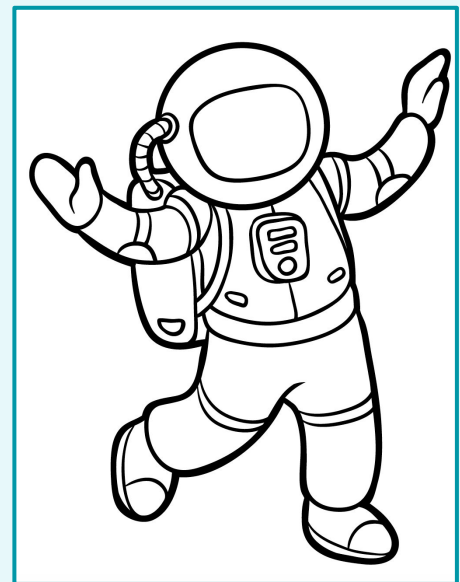
- Show 10 paper clips. Ask, **How many are there?** Count together as you point to each paper clip. Repeat the total. **There are 10 paper clips!**
- Ask your child to make a matching set with 10 paper clips.
- Repeat 2-3 more times for numbers between 0 and 10. Your child can also show you a set and ask you to count.



Independent Learning: My Space Suit

MATERIALS: [Space Suit](#), [A Voyage to Space](#), crayons or watercolor palette, child-safe scissors, glue, pieces of cloth, *optional - decorative items like buttons, crumpled paper*

- Talk with your child about space suits and why they are important for astronauts. You can refer to *A Voyage to Space*.
- Have your child design a space suit on paper or decorate the provided drawing by painting it and adding materials.
- After, ask, **What is special about your space suit?**





Literacy: Let's Talk About Astronauts

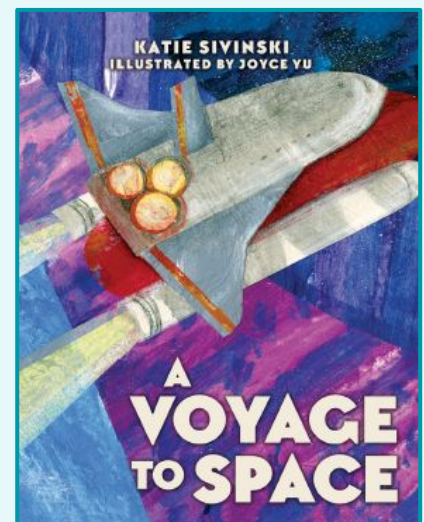
- What do you think it would be like to be an astronaut and travel to space?
- Ask your child 2-3 follow-up questions. **Would you like to be an astronaut? Why or why not?** Or, **If you were an astronaut what would you like to do? What planets would you visit?** Practice having a back and forth conversation.

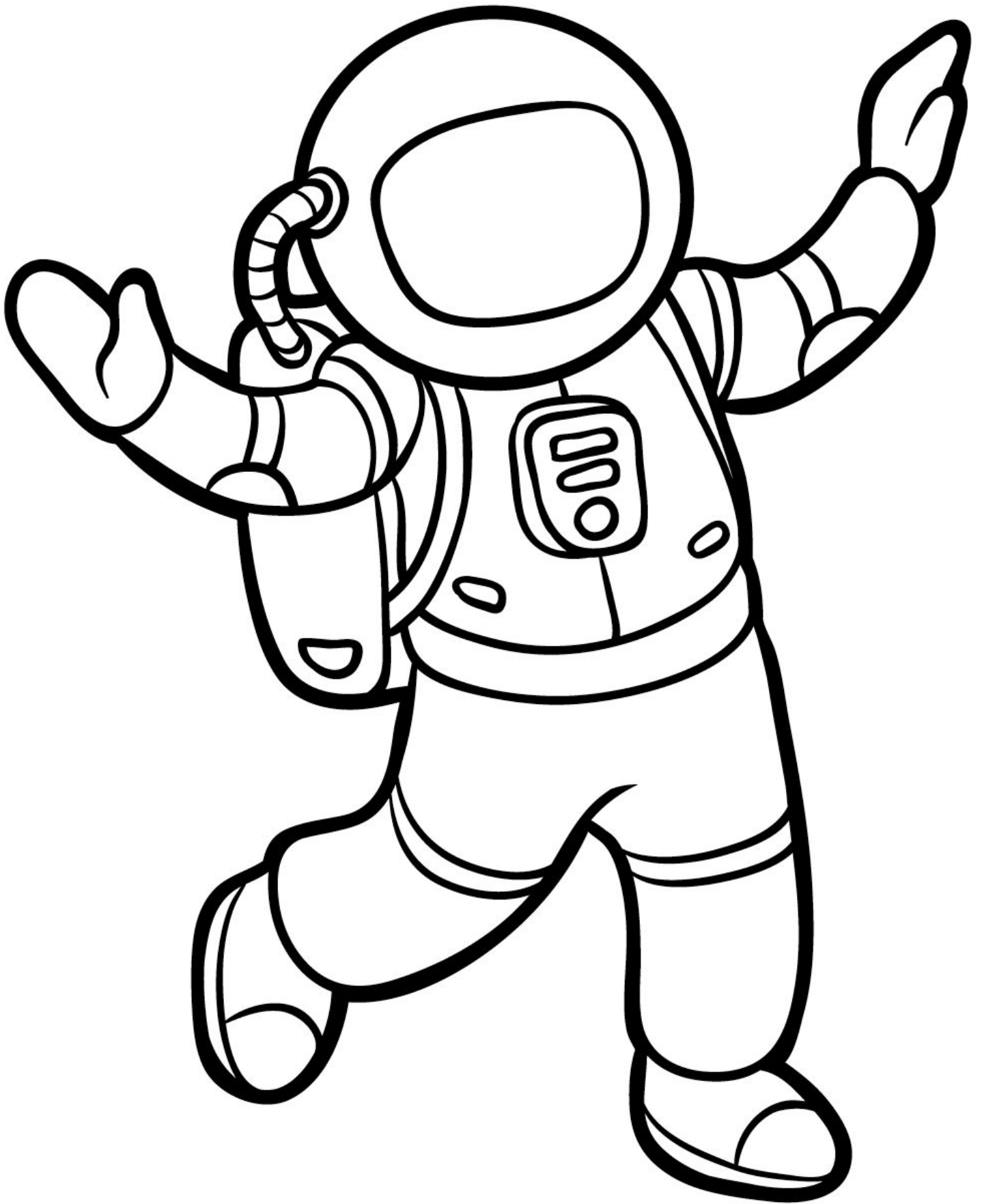


Read: *A Voyage to Space*

MATERIALS: [*A Voyage to Space*](#)

- Read the book with your child.
- Show pp.18-19 and ask, **What do you think it would be like to experience microgravity and float around? Would you like to try it? Why or why not?**





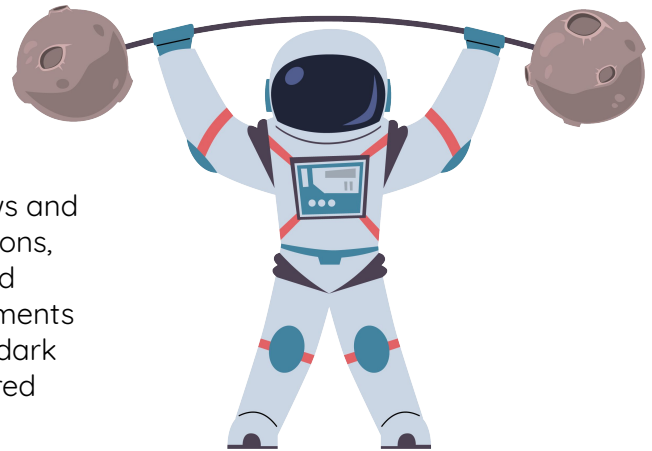
Week 4

PK3 Unit 10 Week 4 Overview

Shadows

This week your child will:

Learn about light and things related to light, like shadows and reflections. They will make art with shadows and reflections, blend the parts of words, learn about compromising, and make sets of up to 10 objects. You can do simple experiments at home by shining a flashlight through a colander in a dark room to make it look like stars. Or, put transparent colored paper over a flashlight to mimic the northern lights.



Key Vocabulary



gravity

the force that causes something to fall to the ground or to be attracted to another planet



reflection

an image that you can see in a mirror, glass, or water



shadow

the dark shape made when someone or something stands between a surface and the light

Create Connections

This is the last week of our unit on space. Before you begin the packet, write and draw about something exciting that you have learned so far.

**Think
About It!**



STEM: Comet Freeze Dance

MATERIALS: paper, pencil, music, 0-10 number cards

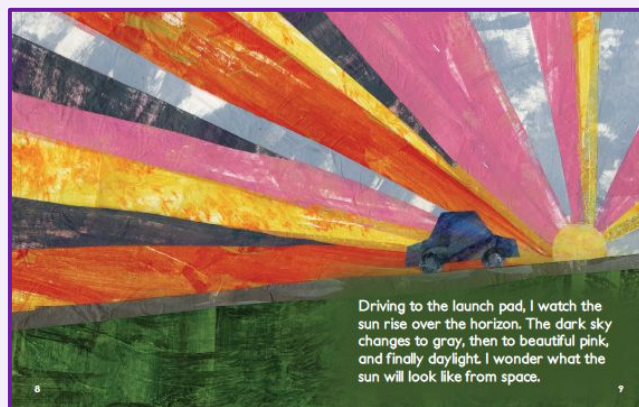
- Place the number cards in different places on the floor. Name the numbers on the floor together.
- **When the music is playing you can dance. Pretend to be a comet flying around in space. When the music stops, I will say a number. Fly like a comet to the number on the floor and freeze by it.**
- Play a few rounds. Then allow your child to lead and say a number for you to find.
- You can also pretend to be astronauts walking in zero gravity or planets orbiting around the sun.



Independent Learning: Sunrise Art

MATERIALS: [*A Voyage to Space*](#), watercolor palette, paper, *optional - glue, colored strips of cloth or paper, magazines, or foil*

- Talk with your child about the sunrise on pp. 8-9. **What do you notice about how the illustrator made the picture?** Talk about using different strips of materials or paint colors to make the sunrise.
- Have your child paint a sunrise picture using paint or strips of cloth or colored paper.
- After, ask, **Tell me about your picture. What colors did you use for your sunrise?**

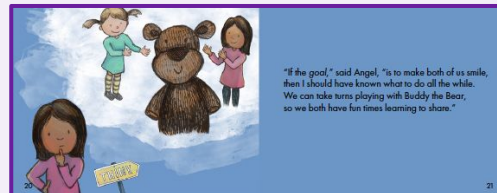




Literacy: Compromise

MATERIALS: paper, crayons, *Optional* - [Friends Puppets made previously](#), [Buddy the Bear](#)

- We have been talking about ways to solve a problem. One way is to compromise. When two people compromise, it means they both get to do a little bit of what they want and are both happy. Provide an example, like taking turns when both of you want to go first when playing a game.
- With your child, act out a compromise using puppets! Repeat using different scenarios from home, like wanting the same toy.
- *Optional* - Read *Buddy the Bear*. Talk about pp. 20-25. Say, **Angel and Bri compromised. They both wanted to play with Buddy, but they decided to take turns and play together.**



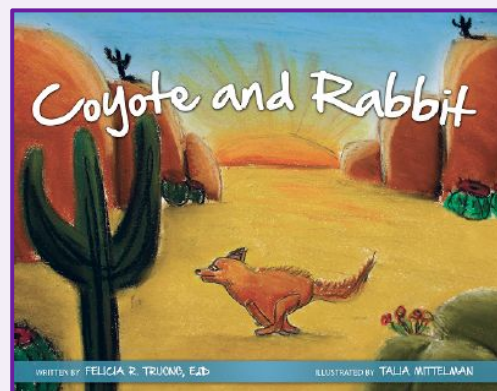
You can access a pre-recorded reading of *Buddy the Bear* on the Spakler app in the “Tips for Adults” section, Healthy Bodies, Healthy Minds.



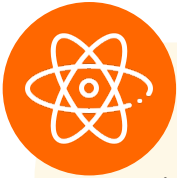
Read: Coyote and Rabbit

MATERIALS: [Coyote and Rabbit](#)

- Read the book with your child.
- **Coyote was very angry at Rabbit. Have you been angry before? How does it make your body feel and look?** Talk with your child about ways they can tell they are angry. Their face isn’t smiling, they have strong feelings in their body, or their heart might beat faster.



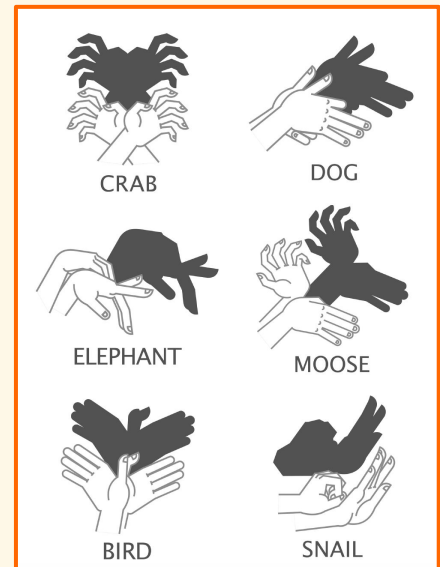
You can also access a pre-recorded reading of this book on the Spakler app in the “Tips for Adults” section, Blast Off Into Space!



STEM: Shadows

MATERIALS: [Hand Shadows](#), lamp or flashlight

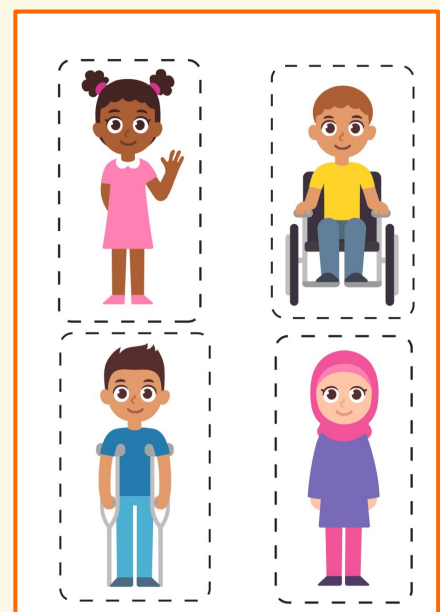
- Go in a dark room if using a flashlight or lamp. Or go outside and use sunlight to make shadows.
- **A shadow is something that appears when something blocks the light.** Demonstrate how to make a shadow. Encourage your child to make a shadow with their hands and describe what they notice. The shadow does what their hand does.
- Allow them to explore shadows by seeing if they can make them larger or smaller depending on how close or far away they are from the light.
- They can make the hand shadows in the pictures or make up shapes of their own.



Independent Learning: Asking for Help

MATERIALS: [Friends Puppets](#) made on day 7

- Sometimes we feel angry and frustrated and do not know how to calm down. A grown-up or friend can help us!
- Have your child think of a time they needed help. Ask, **How did you ask for help? Who helped you?**
- Allow your child to practice asking for help using the puppets.
- After, ask, **Show me how the puppets asked for help. Did the others help that puppet?**





Literacy: Tell Me About It

- This week we will talk about space and learn about light. We will learn the difference between natural light like fire from nature and man-made light like lamps.
- Ask, **What would you like to learn? Why? Where can we find more information?**



Journal Prompt: My Shadow

MATERIALS: crayons, pencil, My Shadow Journal Page

- With your child, talk about shadows. Point out the shadows of objects around the room.
- Have your child draw a picture of themselves and their shadow.
- After, ask, **What are you doing in your drawing? Where is your shadow? Is your shadow doing what you're doing?**

Name: _____

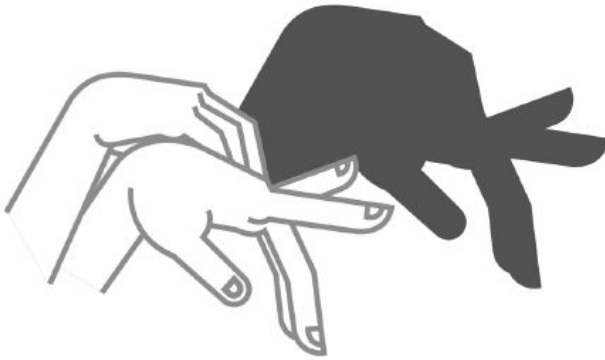
Draw a picture of yourself and your shadow.



CRAB



DOG



ELEPHANT



MOOSE



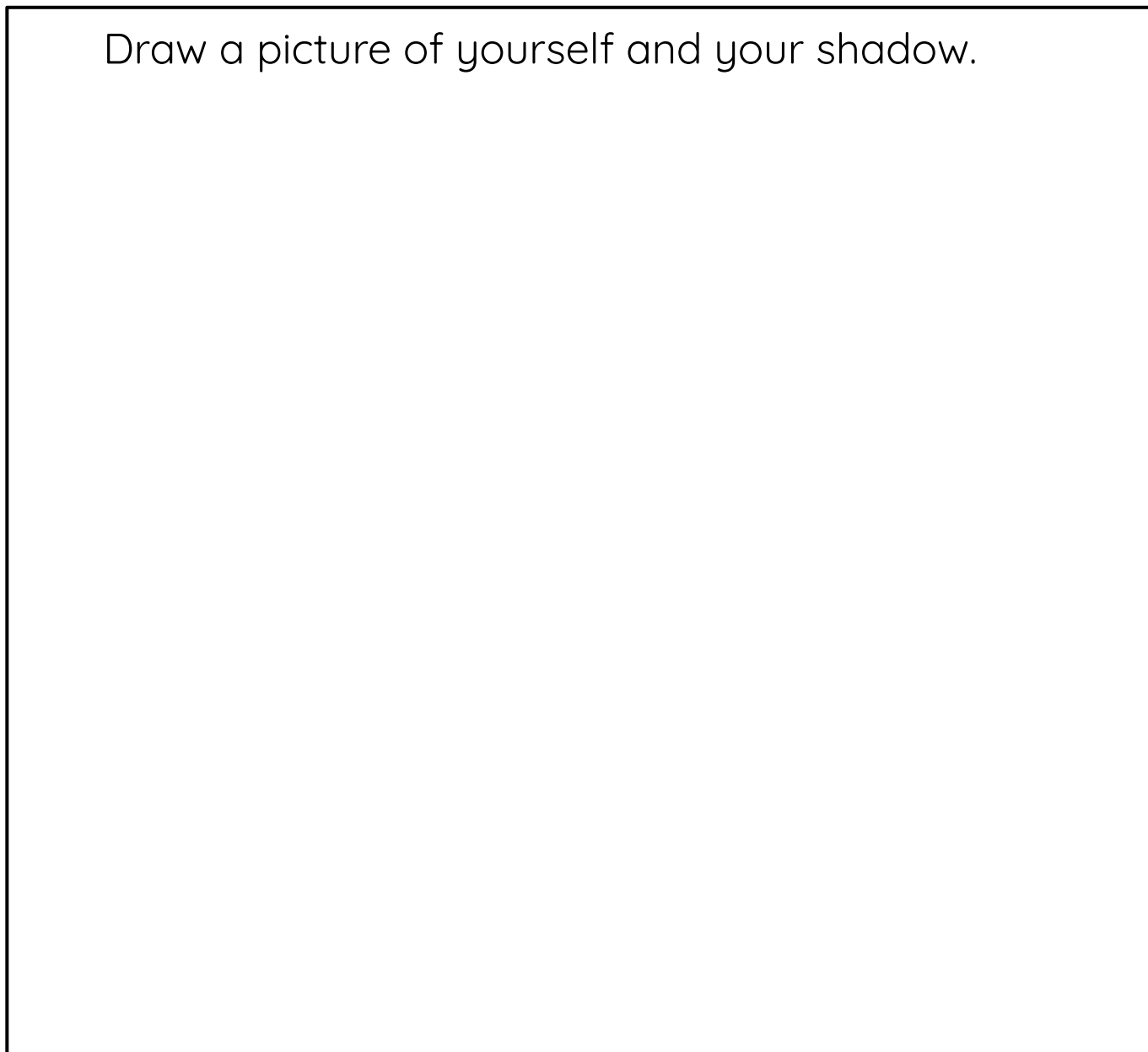
BIRD



SNAIL

Name: _____

Draw a picture of yourself and your shadow.



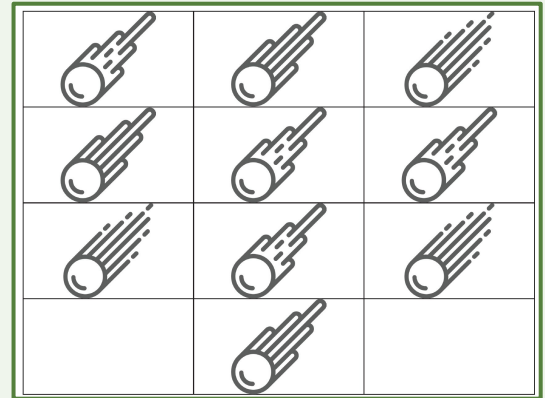


STEM: Comet Sets

MATERIALS: [Comet Sets](#), crayons, child-safe scissors, number cards from 0-10

- Have your child count the comets and then color and cut them out.
- Put out 6 comets and ask your child to count them and find the corresponding number card (6).
- Repeat several times with different amounts.
- *Optional - your child can pick a number and make a set of comets. Repeat several times.*

Keep the number cards for use throughout the unit.



Independent Learning: Light Puzzle

MATERIALS: [Light Puzzle](#), crayons, child-safe scissors, *optional - glue the puzzle onto cardboard before coloring and cutting out*

- Talk about the different sources of light in the puzzle. Say, **There are two types of light - light that is from nature and light that people make.** Talk about the natural sources of light like the fire, moon, and stars, and the man-made sources like the streetlight and house light.
- Have your child color and cut out the puzzle. Then they can put the pieces in order from 1 to 10.





Literacy: Blending Sounds Review

- **Let's blend sounds to make words! I will blend the beginning sound and the rest of this word. J-am, j-am.** Repeat faster as you blend the two parts together. **J-am, jam. You try, j-am, jam!**
- **Your turn!** Have your child try to blend p-ot (pot), c-ap (cap), and h-ut (hut).

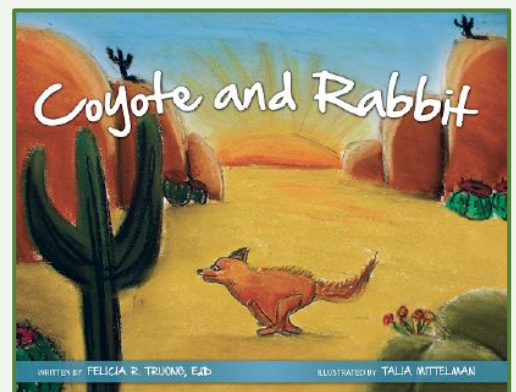


Read: *Coyote and Rabbit*

MATERIALS: [*Coyote and Rabbit*](#), [Stop, Think, Act](#)

- Read the book with your child.
- Show the “stop, think, act” pictures and talk about how to solve a problem that made them angry. Say, **Coyote was angry, but he decided to stop, think, and then act. Sometimes, it is hard to think when we are angry. We can stop and take some deep breaths, think about the problem, and find a safe solution. Then try it out!**

You can review calm down strategies with your child on the Spakler app in the “Calm Down” pod in the Play section.





Let's Move: Shadow Movements

MATERIALS: *optional - music*

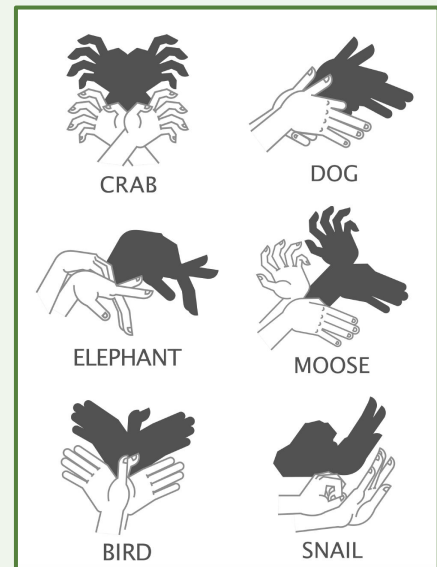
- **Let's pretend to be each other's shadow.** Have one person dance or move around. The other person is the shadow and copies the movements.
- Take turns being the leader and the shadow.

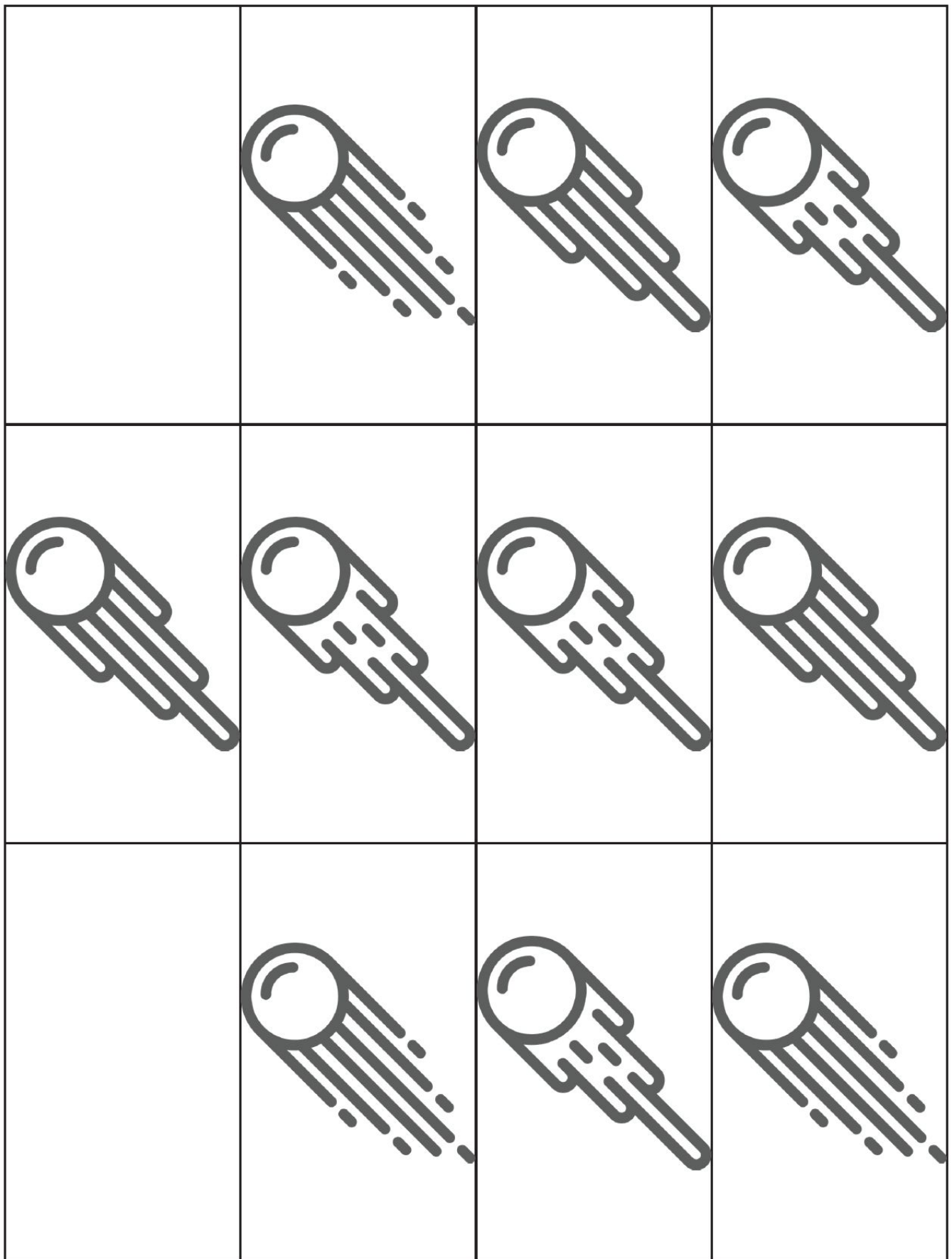


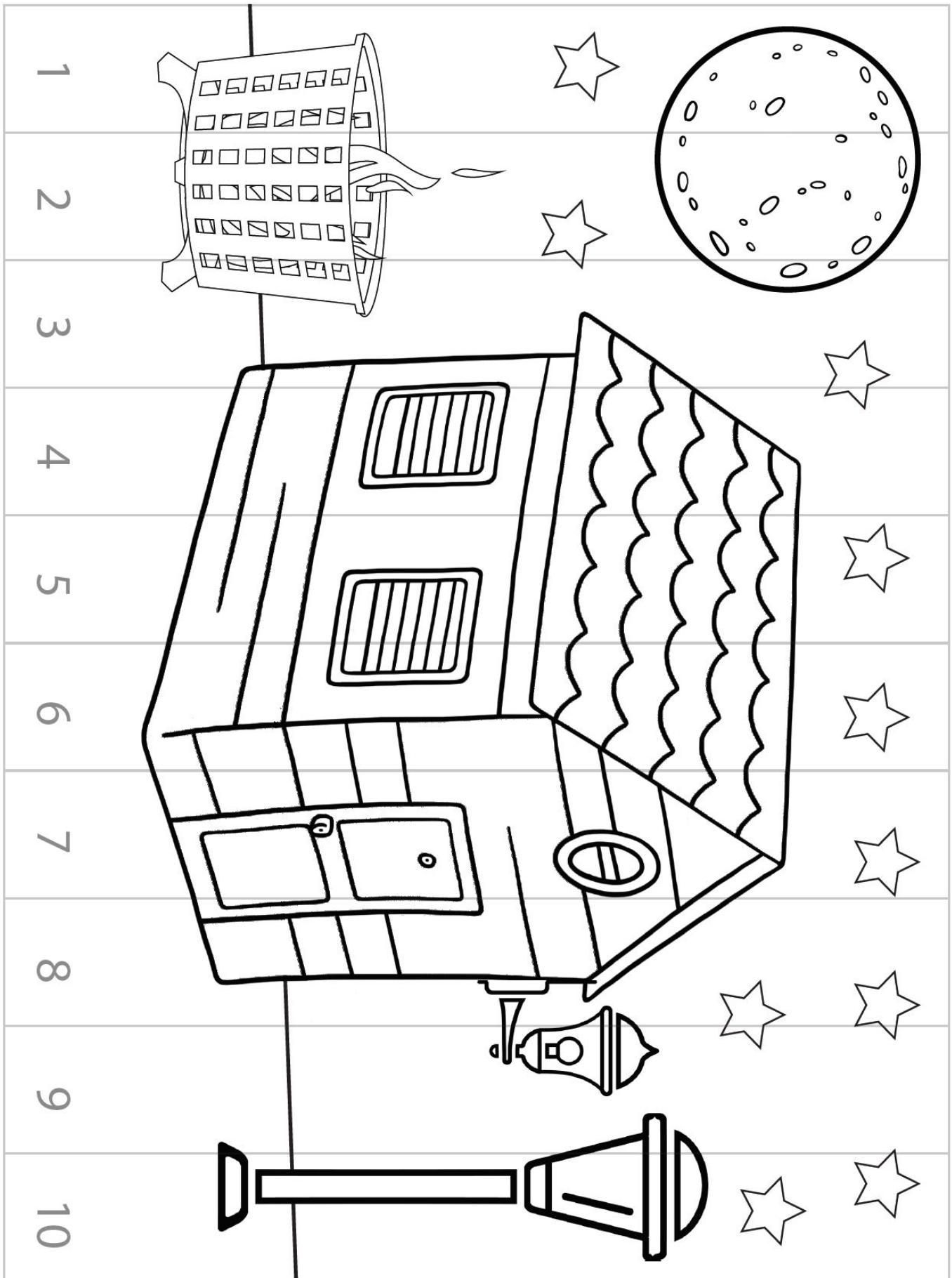
Learning Together: Shadow Theater

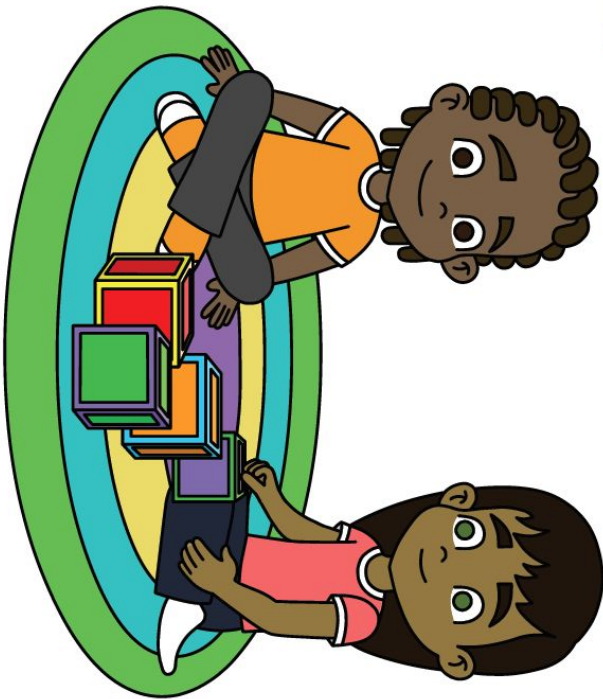
MATERIALS: [Hand Shadows](#), lamp or flashlight, a room with wall space, *optional - toys or props with interesting shapes*

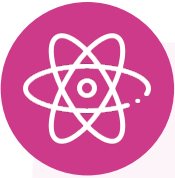
- If using a lamp or flashlight, go into a dark room. Or go outside and use sunlight to make shadows.
- **Let's make a shadow theater! Let's use our hands to make different animals.** Use the pictures to show your child how to create shadows.
- Have fun making different characters and acting out a scene together!











STEM: Reflections

MATERIALS: 1-2 mirrors, or selfie mode of phone, *optional - shiny metal objects like spoons, or glass objects like drinking glasses (supervise carefully), windows, water, etc.*

- A reflection happens when light bounces off something shiny, like a mirror, glass, or water. Look at the mirror and describe what you notice.
- Encourage your child to explore the mirrors. Experiment with having two mirrors face each other to get an endless number of images. Try to find reflections in the water, the mirror, a window, or shiny spoons.



Independent Learning: Reflection Portrait

MATERIALS: mirror or phone turned to selfie mode, paper, crayons or watercolor palette

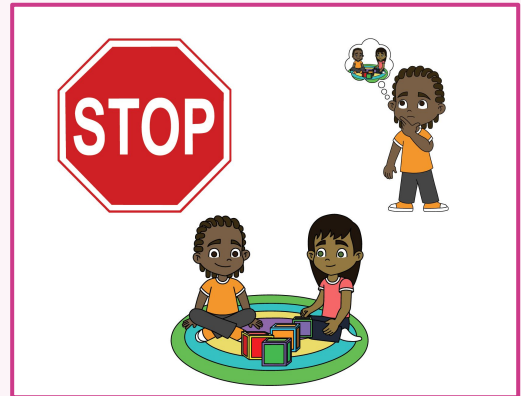
- Have your child look at their reflection and draw their picture by looking at their reflection.
- After, ask, **What was it like to draw yourself by looking at your reflection? Was it hard?**



Literacy: Letter to Coyote

MATERIALS: [Coyote and Rabbit](#), [Stop. Think. Act.](#), paper, crayons

- Talk with your child about what they would say to Coyote if they could help Coyote solve his problem.
- Have your child write a letter to Coyote to offer a solution.
- After, ask, **What help did you give Coyote in your letter?**



Journal Prompt: Gravity

MATERIALS: crayons, pencil, Gravity Journal Page, [A Voyage to Space](#)

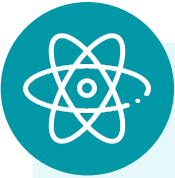
- Say, **Gravity helps us to stay on Earth and not float around.** Show pp.18-19 of *A Voyage to Space* to show what it looks like when we have little gravity.
- Have your child write and draw about what it would be like to live with no gravity.
- After, ask, **What do you think it would be like to live in a place with no gravity? What would you do if there were no gravity?**

Name: _____

What would it be like to live in a place with no gravity?

Name: _____

What would it be like to live in a place with no gravity?



STEM: How Many Fingers?

MATERIALS: *optional - number cards from 0-10*

- Show 7 fingers. **How many are there?** Count together as you move each finger from left to right (from their view). Repeat the total. **There are 7 fingers!**
- Ask your child to show 7 fingers.
- Repeat 2-3 more times for numbers between 0 and 10. Your child can also show you a set and ask you to count.
- For a challenge, show your fingers and have your child find that number of objects around your home.



Independent Learning: Say Goodbye to “Blast Off Into Space”

MATERIALS: *paper, crayons*

- Talk with your child about their favorite part of learning about space, astronomers, and astronauts. It could be an activity or a book.
- Have them draw and write about it.
- After, ask, **What did you write about? Why was that your favorite?**



Literacy: Guess the Word

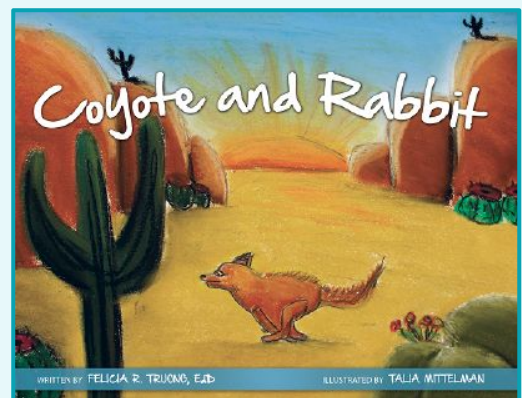
- **Let's play a game. I will give you clues about something we have been learning about. You try to guess the word.**
- Use theme-related words, such as the thing you see when you block the light (shadow), what you see when you look in a mirror (reflection), the scientist who studies space (astronomer).
- Switch roles so that your child can give you clues to guess.



Read: *Coyote and Rabbit*

MATERIALS: [*Coyote and Rabbit*](#), [*Stop Think Act*](#)

- Read the book with your child.
- **Coyote used stop, think, and act to make the right decision about Rabbit. Let's think about a problem and talk about how you can use stop, think, and act.**
- You can use an example of a recent problem, such as a sibling taking a toy away from them.



Welcome to Unit 10, Blast Off Into Space! In Unit 10, your child will learn about the different things that make up Blast Off Into Space like land, water, and air.

