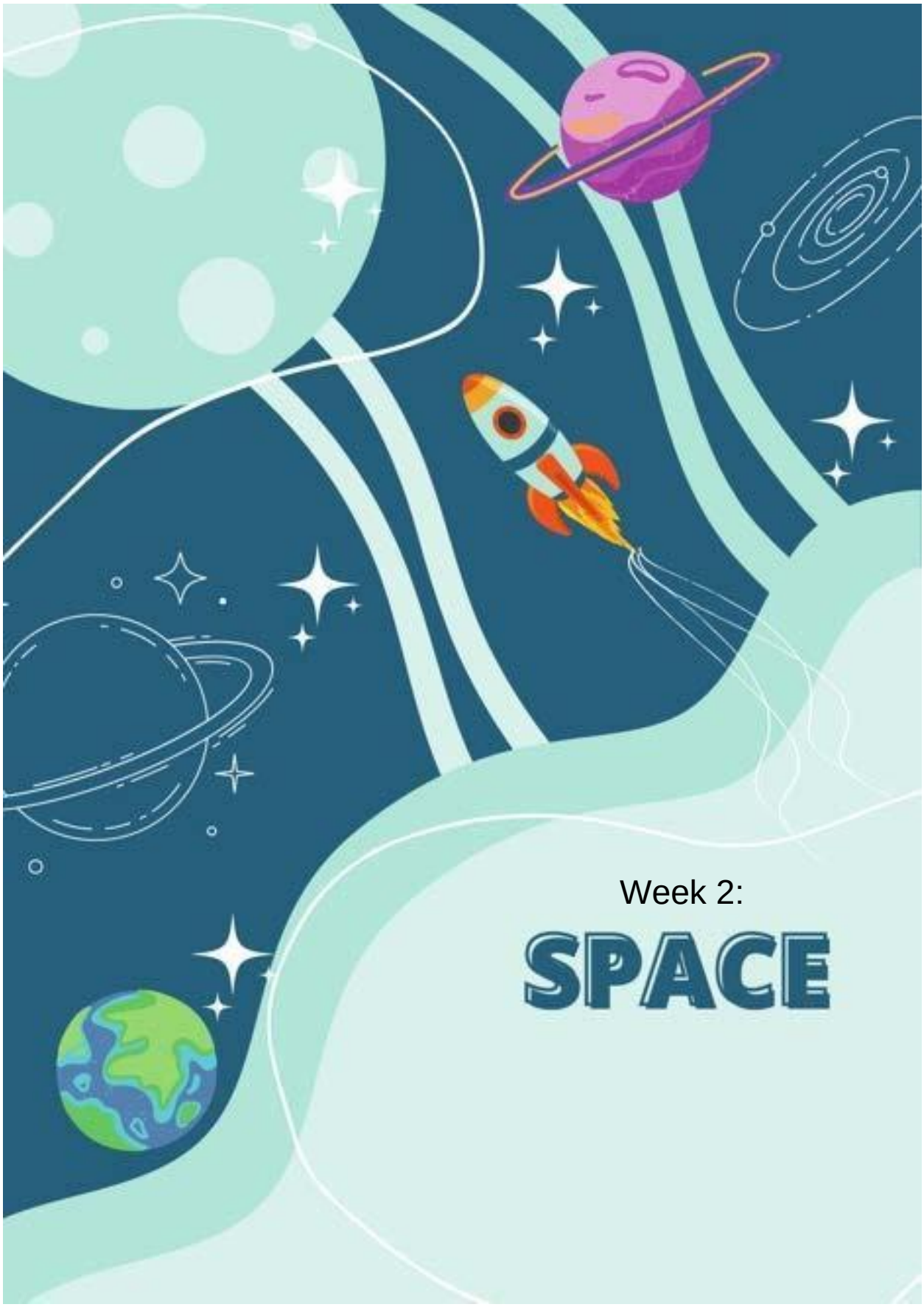

Week 2:
SPACE

Materials List

- Black construction paper
- Pencils
- Pastel colored chalk
- Q-tips
- Paper towels
- Paper Plates
- Black, White and Yellow Paint
- Various color paint
- Newspaper or anything to use as a table cover
- Paint Brushes
- Scissors
- White Yarn
- Construction paper in various colors
- Pencils
- Hole Punchers
- Circular item around 5 inches across (use for tracing
- 8-10 packages of Oreos
- Vanilla pudding (or substitute yogurt)
- 1-2 Boxes of Green Jell-O
- 5-6 bags of large marshmallows
- Green sugar sprinkles
- Ziploc bags
- Green straws
- Medium/Large Clear cups
- Plastic spoons
- Crayons
- Markers
- Colored Pencils
- White paper
- Large construction paper various colors
- Glue
- 1 large poster board folded in half
- Small Plastic Bottle (1 per child)
- Corks
- Paper Towel Roll (1 per child)
- Measuring Spoons
- Baking Soda
- Vinegar
- Tape
- Flour
- Corn flour (cornstarch)
- Salt
- Oil
- Hair conditioner
- Black paint, or food dye
- Glitter
- medium sized bowl
- Large mixing spoon
- Popsicle sticks
- Child-safe knife

Activity Name	Chalk Pastel Galaxy Art
Area of Development	Arts & Crafts

Activity Objectives:

Fine Motor Skills: Practicing holding and maneuvering the chalk pastels and Q-tips helps develop fine motor skills, which are important for tasks like writing and drawing.

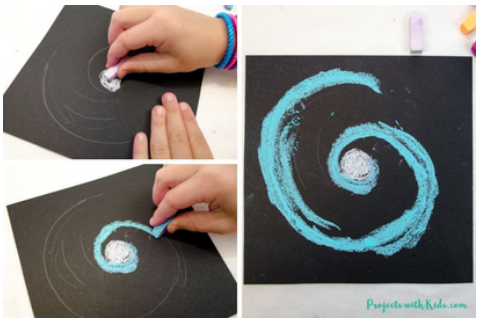
Introduction to Space Science: Introduce basic concepts about space, such as the idea of galaxies, stars, and the universe, through the video and the creation of their own "galaxies."

Materials:

- Black construction paper cut into 6x6 squares
- Pencils
- Pastel colored chalk
- Q-tips
- Paper towels

Procedure

- Begin by showing video about the galaxy https://www.youtube.com/watch?v=TAK0JkOArS4
- Cut black construction paper into 6x6 squares
- Pass out 2 squares to each child
- Allow the children to make galaxy shapes using their pencil. (Simple spiral shapes)
- Use the pastel chalk to follow the pencil lines and draw thick lines.
- Once they have created thick lines with different colors, have the children use their Q-Tip to blend the chalk continuing to follow the shape.
- Once it is blended, allow children to take a white chalk and draw starts around their galaxy filling in any black areas on their paper.



Activity Name	Solar System Mobile
Area of Development	Arts & Crafts

Activity Objectives:

Scientific Inquiry and Research: Foster curiosity and a desire to learn more about the solar system by encouraging children to ask questions, conduct research, and share interesting facts about the planets as they work on their mobiles

Sequencing and Following Directions: Follow a series of steps to create the solar system mobile, reinforcing sequencing skills and the ability to follow multi-step instructions.

Materials:

- Paper Plates
- Black, White and Yellow Paint
- Various color paint to decorate the planets
- Q-Tips
- Newspaper or anything to use as a table cover
- Paint Brushes
- Scissors
- White Yarn – cut into 8 inch pieces and 1 yard pieces
- Construction paper in various colors
- Pencil
- Hole Punchers
- Circular item around 5 inches across (use for tracing

Procedure

- Spread out the newspaper or table cover and pass out 1 paper plate per child
- Squeeze out a little black paint on the paper plate and use the paint brush to paint the bottom of the plate black and give it a minute to dry.
- Then use the Q-Tip to paint on some stars and meteors using the white and yellow paint.
- Set the plate aside to dry.
- Use the circular item to trace around it onto two layers of yellow construction paper. then draw the rays of the sun and cut out the layers together. This will leave you with 2 identical suns that will act like the bread in a sandwich with the yarn hanger for your mobile held in side (step coming up)
- Use a Q-tip to add some gold and orange paint to the center of each sun, only on the areas that will be on the outside of the sandwich.
- Set them aside for the paint to dry.
- Use the circular item again to trace circles on different color construction paper to create the planets.
- Allow the children to paint he planets different colors using their imagination.
- Take the now painted and dry galaxy plates and have the children cut a spiral as pictured below (about 2" wide as you go around and a stub left in the middle). This is the base of the easy solar system project.
- Punch a hole in the very center of the spiral, which will be for the hanger. And then punch 9 more holes, spaced out as the spiral goes downward, with the last hole for Pluto being at the very end of the spiral.
- Punch a hole on the top and bottom of one of the suns.
- Cut a length of white yarn approximately 1 yard long and fold it in half.
- Then, weave it into the holes you put in the sun so that the string is on the back side, leaving a nice long tail from which to hang the rest of the mobile. - - - Make a loop above the sun for hanging it up.
- Now allow the children to use the glue stick to place the other sun onto the sandwich, with the string in the middle.

Procedure

- Finally, weave the ends of the string into the middle hole on the plate and knot it 3 times. Trim away the excess, though not too close to the knot.
- For each planet, have the children punch a hole in the top.
- Cut a piece of white yarn approximately 8 inches long for each of the 9 planets.
- Allow the children to line up their planets in order and start by lacing a piece of yarn through the hole made in Pluto. Then lace the 2 ends of the yarn through the hole made in the galaxy mobile base and make a double knot. It should hang down below the plate about 1-2 inches.
- Repeat this process, working from the outside in until all of the planets have been placed on the mobile.
- Trim away the excess yarn on the ends of each knot.

Activity Name	Alien Parfait
Area of Development	Cooking

Activity Objectives:

Language Development: Promote language development through discussions about the cooking process, ingredients, and the concept of space-themed alien parfaits. Encourage children to use descriptive language to describe the taste, texture, and appearance of the finished product.

Math Concepts: Introduce basic math concepts such as measuring ingredients and dividing portions, providing practical application for mathematical skills.

Materials:

- 3-4 packages of Oreos
- Vanilla pudding (or substitute yogurt)
- 1-2 Boxes of Green Jell-O
- 5-6 bags of large marshmallows (you'll need two per parfait)
- Green sugar sprinkles
- Ziploc bags (1 per child)
- Green straws (you'll need two per parfait)
- Clear cups (1 per child)
- Plastic spoons

Procedure

- Begin by passing out a Ziploc bag and 2 Oreo cookies to each child. Have the children place cookies in their Ziploc bag. Make sure Ziploc bag is closed tightly.
- Allow children to begin crushing their Oreo cookies using their hands.
- Have the children pour half of the crushed cookies into the bottom of a clear cup.
- Allow children to scoop their pudding or yogurt on top of the crushed cookies. Repeat for 2 layers.
- Then top with green Jell-O
- Slide a large marshmallow onto both of the green straws
- Apply a small amount of pudding to the end of each marshmallow and dip it into a plate of green sugar sprinkles to create the alien's eyes
- Finally, insert the straws into the parfait and you have your alien.

Activity Name	Our Astronaut Class Book
Area of Development	Language & Literacy

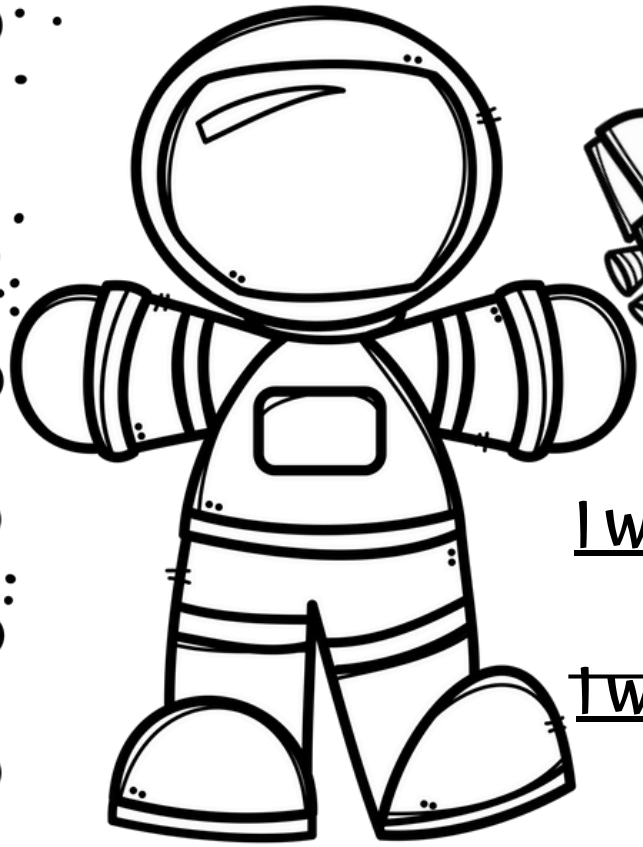
Activity Objectives:

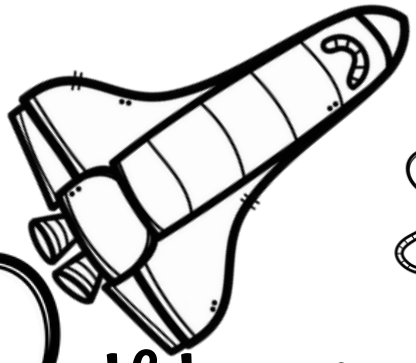
Writing Skills: Enhance writing skills by completing the "If I Were an Astronaut" worksheet, encouraging children to write thoughtful responses and express their ideas clearly.

Reading Skills: Improve reading skills as children read their entries and the entries of their classmates when the book is completed.

Materials:

- If I were an astronaut activity worksheet – Click on the bottom page to print PDF
- Crayons, Markers and or colored pencils
- White paper (1 per child)
- 1 large construction paper (per child)
- Glue
- Stapler or hole puncher
- 1 large poster board folded in half





If I were an astronaut...

I would take _____ to space.

I would miss _____ the most.

My favorite planet would be

_____

My favorite space food would be

_____

My favorite part about being an astronaut would be

_____

_____

_____

Procedure

- Begin by passing out a work sheet to each child
- Work with the children to answer their questions.
- Give each child a white paper and allow them to draw themselves as an astronaut.
- Take a large construction paper and glue the worksheet on the top and their picture on the bottom
- Gather all of the sheets and staple together to create a long book.
- Then take the poster board and fold down the middle for the cover.
    - Write “If I were An Astronaut Class Book”
    - Author – “the children in your classroom”
    - Illustrators – “The children in your classroom”
    - Example: Author – Our friends in Ms. Christina’s Class

Activity Name	Baking Soda Rocket
Area of Development	STEAM

Activity Objectives:

Understanding Chemical Reactions: Introduce children to basic chemistry concepts by observing the reaction between baking soda and vinegar.

Problem Solving: Develop problem-solving skills by assembling and launching the rocket.

Materials:

- Small Plastic Bottle (1 per child)
- Cork
- Paper Towel Roll (1 per child)
- Tablespoon
- Baking Soda
- Vinegar
- Straws
- Tape

Procedure

- Begin by having the children tape three straws to the side of the bottle so that it can stand upside down.
- Flip the bottle right side up and pour about 2 cm of vinegar
- Have the children place 2 tablespoons of baking soda into the paper towel roll and create a parcel that can fit into the bottle.
- Choose a launch area outside. It needs to be a hard surface.
- When you are ready to launch, have the children drop the parcel into the bottle, cover the bottle with the cork and put the rocket down.
- Observe the blast off!

Activity Name	Space Playdough
Area of Development	STEAM

Activity Objectives:

Critical Thinking and Prediction: Foster critical thinking skills by prompting children to make predictions about the outcome of mixing different ingredients.

Observation and Comparison: Encourage children to observe and compare the textures and appearances of the dough at different stages of the process.

Materials:

- 1/2 cup plain flour
- 2 tbsp corn flour (cornstarch)
- ¼ cup of boiling water
- 2 tbsp salt
- 1 tbsp oil
- 1 tbsp hair conditioner
- black paint, or food dye
- lots of glitter
- medium sized bowl
- Large mixing spoon

Procedure

- Place the flour and corn flour (cornstarch) in a medium sized bowl and mix well.
- Make sure your water is boiling hot, then add the salt to the water and stir until it starts to dissolve.
- Add the oil, hair conditioner and lots of black coloring to the salty water and mix well.
- Add the water mixture into the flour and mix until it comes together to form a dough.
- You may need to add a little more flour if your dough is too sticky, but the more you mix and knead it the softer it will become.
- Flatten out the dough and add lots of glitter, continue to knead the dough.

Activity Name	Oreo Moon Phases
Area of Development	COGNITIVE

Activity Objectives:
Cognitive Thinking: Encourage children to compare the shapes of the scraped frosting to the actual moon phases depicted in the video, promoting cognitive reasoning and understanding.

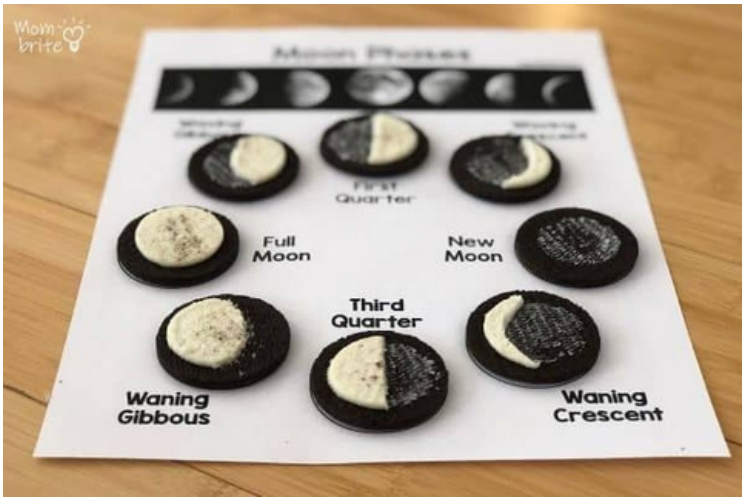
Sequential Ordering: Reinforce the concept of sequential ordering by guiding children to arrange the Oreo cookies in the correct order of moon phases.

Materials:

- Oreo Cookies
- A child safe knife or popsicle stick
- 1 paper plate per child or you can also have the children use the printable

Procedure

- Show your children the following video about the moon phases. https://youtu.be/Ie2WRraxdPs
- Give each child 8 Oreo cookies, a paper plate or the printable sheet and a popsicle stick or child-safe knife.
- Allow the children to separate the Oreo cookies by slowly twisting the top and bottom of the cookie.
- Set the part of the cookies with no frosting to the side.
- Use the knife or popsicle stick to carefully scrape off a portion of the frosting to recreate each moon phase.
- Place the Oreo cookies on a paper plate or the moon phase worksheet in the correct order. Start off with the New Moon and go counterclockwise from there.
- For younger kids, you may want to help draw a line in the frosting so they know exactly how much to scrape off



Moon Phases

mombrite.com

Waxing Gibbous

Waxing Crescent

First Quarter

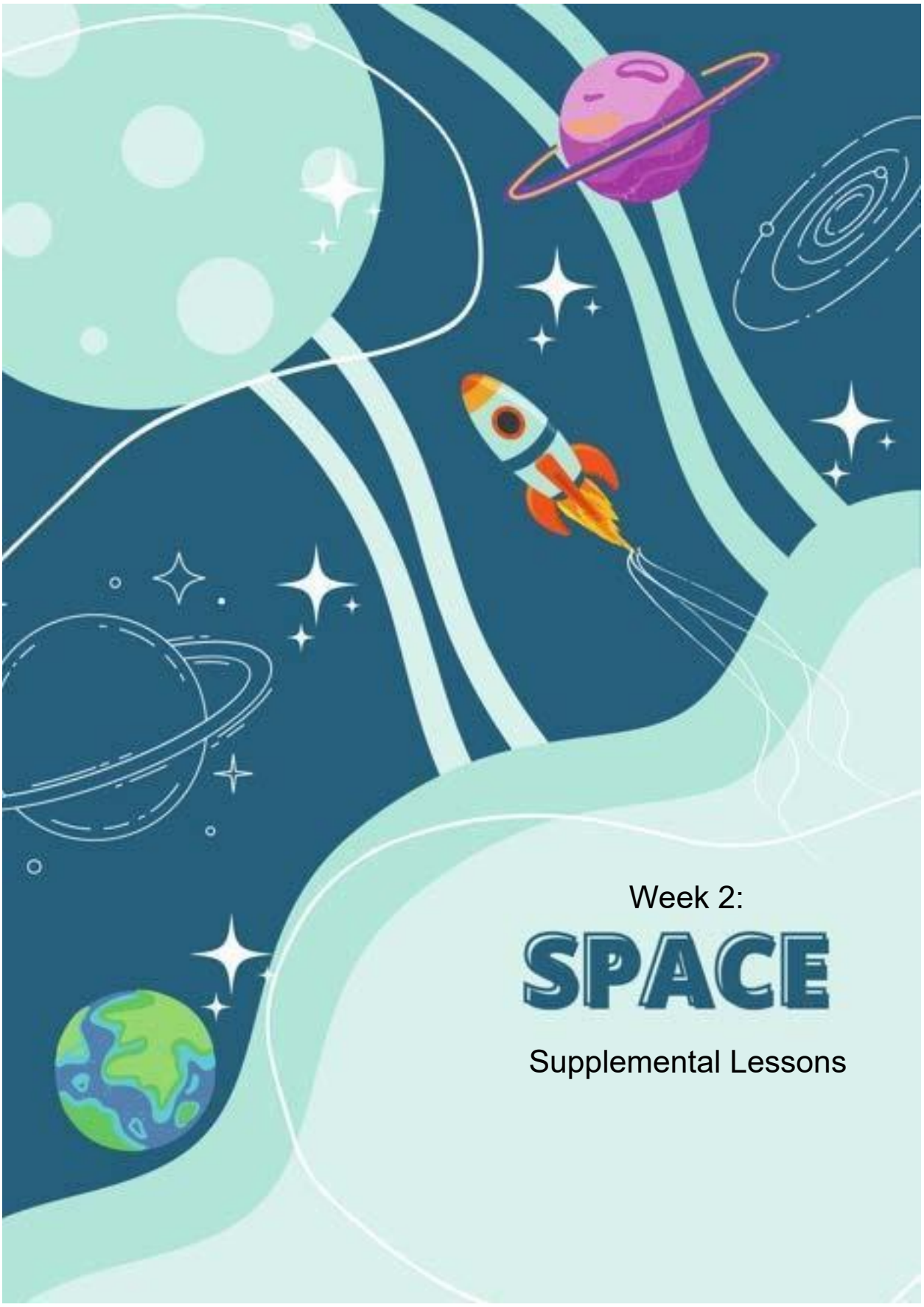
Full Moon

New Moon

Third Quarter

Waning Gibbous

Waning Crescent



Week 2:

SPACE

Supplemental Lessons

Fruit Rockets

15 strawberries, rinsed
1 cantaloupe
30 regular sized marshmallows
wooden skewers
small circle cutter

How to Make Fruit Rocket Snacks

1. Cut cantaloupe in half and use a spoon to scoop out the seeds.
2. Slice cantaloupe in 1/2 inch slices. From those slices, cut into trapezoid-shaped pieces.
3. Cut the rind off of each piece and use the circle cutter to round out the smaller end.
4. Hull each strawberry and then cut each berry into three slices.
5. Layer in the following order on the wooden skewer: cantaloupe, strawberry, marshmallow, strawberry, marshmallow, the tip of the strawberry.

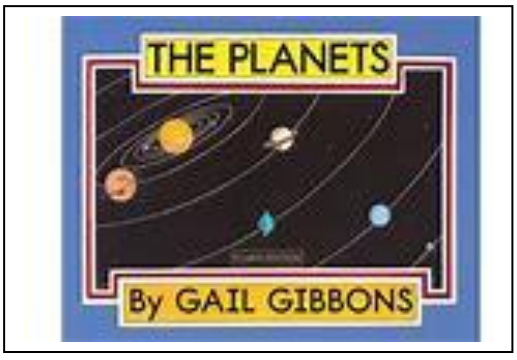
Week:	Space
Subject:	Art
Title:	Glow in the Dark Moon Phases
Supplies Needed:	Salt Flour Grey paint Paintbrushes Glow in the dark paint or make your own glow in the dark paint (directions below) String Straw Wire hanger Wire cutters Hot glue gun and glue sticks DIY Glow in the Dark Paint Highlighter (if you're making your own paint) School glue (if you're making your own paint) Blacklight (if you use the highlighter paint)
Duration of Lesson:	1 Hour - 1 Hour 30 Minutes
Teachers Will:	The first step is to make your moon dough (i.e. salt dough), cut, and bake your moons. It is recommended to make them from salt dough. Mix 1/2 a cup of salt, 1 cup of white flour, and 1/2 a cup of water in a bowl. Knead the mixture together until it forms a soft dough. Divide the dough into eight balls. Flatten the balls into 1/4 inch thick circles. Use a straw to poke a hole near the top of each circle. Bake in the oven at 200 degrees Fahrenheit for 2 hours. Let cool. When the moons cool, paint them on both sides with grey paint. If you are making your own glow-in-the-dark paint, cut open the inside of a highlighter. Rinse out the inside into 1/4 of a cup of water until the sponge turns white. Add 1/2 a bottle of school glue to the highlighter liquid and stir. Paint each of the circles according to one phase of the moon. We painted both sides of each moon so that no matter what way they were facing, you could see the current moon phase. The phases you could use are:

	New Moon Waxing Crescent First Quarter Waxing Gibbous Full Moon Waning Gibbous Last Quarter Waning Crescent Build Your Moon Phases Mobile Now it's time to put it all together. While the paint dries, cut a wire hanger into one long piece and twist it into a circle shape. Use string to hold the two ends of the circle together. Add an + crosspiece to the center of the circle to strengthen it. Tie the moon pieces to the mobile following the real progression of the moon's phases. It's helpful to look at a moon diagram for this stage. Tie a loop to the top of the mobile so you can hang it from a window. Shine a black light on the mobile and watch the moon phases come to life!

Week:	Space
Subject:	Visual Arts
Title:	Galaxy Slime
Supplies Needed:	Borax powder Black food dye White glitter Star erasers White Elmer's glue
Duration of Lesson:	30 Minutes
Teacher Will:	Mix one 4 ounce bottle of white glue with 1/2 a cup of water and enough black dye to dye the glue completely black. At first, your slime may look purple add more black dye to it. Add white glitter to your glue mixture for background sparkle. Mix one cup of warm water and one teaspoon of Borax powder until dissolved. Pour the Borax solution into the glue solution. Stir with a fork until completely combined. Work the slime between your hands until it is completely dry and no longer sticky (check for hidden glue pockets). Add stars to your galaxy slime and you are ready to play!
Students Will:	Consider the elements of art and principles of design to create visually effective compositions

Week:	Space
Subject:	Fine Arts
Title:	Gravity Painting
Supplies Needed:	Washable Paint Water Pipet (medicine dropper) or Spoon White Foam Board (or cardboard) Tissue Paper Glue (mixed with a little water) Paint Brush Permanent Marker
Duration of Lesson:	1 Hour
Teacher Will:	Step 1: Prep Your Work Surface Prep your workspace with a drop cloth and an easel or support to hold your foam board. Step 2: Water Down the Paint Mix your paint with a splash of water. You want to water down the paint so it can flow easily down the paper. Step 3: Drip the Paint Drip the paint on the paper with a pipet (medicine dropper) or spoon. Step 4: Use the Drips as a Creative Prompt Once your paper has dried, ask your students “what you can turn the drips into?”. You may wish to turn your painting upside down or on its side to spark an idea. Use your imagination to think creatively about what you see in the drips. Step 5: Add Collage Elements Add color and creativity to turn your drips of paint into a work of art.
Students Will:	Produce works that intentionally incorporate the elements of art 

Week:	Space
Subject:	ELA
Title:	The Planets (By: Gail Gibbons)
Supplies Needed:	A copy of “The Planets”
Duration of Lesson:	Paper Pencils/Pens
Teacher Will:	YouTube Read Aloud: https://youtu.be/gyHmwssuaUs Explain that cause-and-effect relationships can also be found in nonfiction and can be used to understand the content of the text. I will begin reading The Planets by Gail Gibbons identifying and charting cause-and-effect relationships in the text, stopping at page 4. I will model my thinking as I identify and/or infer the cause-and-effect relationships. Ask: How did I identify a cause-and-effect relationship in the book? Students should respond that they read the text and thought about what happened and why it happened. Extension: Chart a K-W-L chart prior to and after reading “The Planets”- post in classroom.
Students Will:	Choose words and phrases to convey ideas precisely. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.



Week:	Space
Subject:	Language/Math/Music and Drama
Title:	Planet Group Activities
Supplies Needed:	Cotton Balls Bowls Spoons Blindfold Paper Paint Markers Blindfold Sticky Tape
Duration of Lesson:	45 Minutes
Teacher Will:	Each rotation should last 15 minutes. If you need more time, please allow for that. Write directions on chart paper for each station. **Floating In Space** Equipment: Cotton wool balls, bowls, spoons, blindfold How To Play: Divide kids into pairs or teams. Give each team a bowl full of cotton wool balls plus an empty bowl and a spoon. Blindfold a member of each team and on the word "GO" they have to see how many balls they can transfer from one bowl to the other within 30 seconds. It is very fun to play because the cotton wool balls are so light that they are not sure if they are picking any up or not. **Landing on the Moon** Equipment: Paper and paint or colored markers, blindfold, sticky tape How To Play: In advance, create a poster with several planets and stars on it (including the moon) and make some paper astronauts (one for each player). Blindfold each player in turn and give them an astronaut to see if they can place their astronaut on the moon. Whoever 'lands' their astronaut on the moon is the winner. **Rocket Shuttle Landing** Equipment: Hula Hoop and paper Hang a hula hoop from the ceiling and provide all the guests with paper to make their own paper shuttles or airplanes. They then practice flying their shuttles by trying to fly them through the hoop. They can start close and get farther and farther away.
Students Will:	Cooperate in groups to accomplish STEM activities.

Week:	Space
Subject:	Language
Title:	Weightlessness Race
Supplies Needed:	4 Bowls 40 Cotton Balls 2 Spoons 2 Blindfolds
Duration of Lesson:	30 Minutes
Teacher Will:	Have students separate the cotton balls by placing 20 in one bowl and 20 in the other bowl. Divide the players into two teams and place one empty bowl and one bowl with the 20 cotton balls in front of the first player on each team. Blindfold the two players and give them each a spoon. Set a timer to 30-seconds and when the timer starts, they will compete to see who can get the most cotton balls into the empty bowl. It's not as easy as it sounds though because they will only be allowed to use the one spoon they were given. They cannot use their hands for assistance. This will be tricky since the cotton balls are lightweight and they won't be able to feel them on the spoon. When the time is up, they can remove their blindfolds and count the cotton balls they transferred into the empty bowl. The player who gets the most balls in the bowl wins that round. Play continues until all the players have completed the task.
Students Will:	Use linguistic skills to cooperate in teams to accomplish a goal.

Week:	Space
Subject:	Physical Education
Title:	Astronaut Training Game
Supplies Needed:	Two beanbags, Two jump ropes, Two rubber balls
Lesson Duration:	30 Minutes
Teacher Will:	This is an excellent physical fitness relay. Divide the players into two teams. They stand behind starting line. At a turning line, 15 feet away, are a jump rope, bean bag, and ball. On signal, the first player runs to the turning line, takes a jump rope, jumps ten times, tosses a bean bag in the air ten times, and bounces the ball on the floor ten times. The player runs back to their and touches the next player who repeats the action. The first team to finish is the winner.
Students Will:	Perform combinations of non-locomotor and locomotor skills in a movement pattern.

Week:	Space
Subject:	Music
Title:	Grab A Planet (Musical Chairs)
Supplies Needed:	8 balls decorated to look like each planet Hula-Hoop Music 9 players
Duration of Lesson:	30 Minutes
Teacher Will:	Place the balls inside the Hula-Hoop. When the music starts the players must walk around the Hula-Hoop. When the music stops the players should all grab a ball. The player who doesn't get a ball is out. Before the next round, you should remove one of the balls from the hoop so there is always one less ball than the number of players. Continue to play until one person is left standing. The last player standing is the winner of the game.
Students Will:	Participate and cooperate in playing the game.

Week:	Space
Subject:	Music and Drama
Title:	Space Charades
Supplies Needed:	N/A
Duration of Lesson:	45 Minutes
	First you'll start by splitting up into two even teams. If you have a larger group, feel free to split up into three or more teams if needed. You should also establish your scorekeeper and timekeeper before the game begins. Decide now how much time each round will last, usually 1-2 minutes is enough time. Now that you have your teams established, choose which team will go first. You can do this with a coin toss, a game of rock-paper-scissors, or any other method you can think of. Whichever team wins the battle of who goes first, they send a representative (the actor) to the front of the room. He or she picks a card from the pile and has to act out the term on the card before the time runs out. While the actor is acting, his or her team members are trying to guess what is written on the card. The actor cannot speak, make any noises, or mouth anything. If the teammates guess correctly within the allotted time, they get a point. If the correct answer was not given within the time limit, that team does not get any points. The teams alternate each round, sending up a different actor each time so everyone can get a turn. The end of the game could be when a team reaches a certain amount of points, when a certain amount of total time has passed, or when you run out of cards. UFO Earth Milky Way Mercury Mars Jupiter Neptune Saturn Rocket Astronaut

	Solar System Galaxy Pluto Satellite Space Shuttle NASA Universe Outer Space Scientist Gravity Planets Eclipse Sky Lunar Astronomy Uranus Comet Meteoroid Constellation Ecosphere Nebula Rotation Zodiac Crater Dust Half Moon Dwarf Planet Starlight New Moon Magnitude