Name: Reynolds, Moon		Grading Quarter: 2	Week Beginning: Week 1 10/7/24-10/11/24		
School Year: 2024-2025		Subject: Science			
Monday	Notes: No School	Lesson Overv			Academic Standards: No School
Tuesday	Notes: Grade 5 Unit 4: Earth and Space Patterns Lesson 1: The Role of Gravity Essential Question: What pulls objects down?	<ul> <li>No School</li> <li>Objective:         <ul> <li>Students will support an argument that gravity causes objects to be pulled toward the center of Earth.</li> </ul> </li> <li>Lesson Overview:         <ul> <li>Assess Prior Knowledge</li> <li>Page 5- Page Keeley Science Probe: Earth's Gravity</li> </ul> </li> <li>Engage         <ul> <li>Academic Vocabulary:                  <ul> <li>Interaction- cause-and-effect relationships that can be observed.</li> <li>Page 6-7- Encounter the Phenomenon: What caused this crater to form?</li> <ul> <li>Video: Barringer Crater</li> <li>Sample Questions:                       <ul> <li>How did the crater get there?</li> <li>What causes things to fall to Earth from space?</li> <li>What causes things to fall to Earth from space?</li> <li>What causes things to fall to Earth from space?</li></ul></li></ul></ul></li></ul></li></ul>		Academic Standards: 5. P1U1.3 Construct an explanation using evidence to demonstrate that objects can affect other objects even when they are not touching. 5. E2U1.8 Obtain, analyze, and communicate evidence to support an explanation that the gravitational force of Earth on objects is directed toward the planet's center.	

	NI-t	Objection.	A and a section
	Notes:	Objective:	Academic
	Grade 5	Students will support an argument that gravity causes objects	Standards:
	Unit 4:	to be pulled toward the center of Earth.	5. P1U1.3
	Earth and Space	<ul> <li>Students will understand that the size of an object affects the</li> </ul>	Construct an
	Patterns	size of the crater that it forms.	explanation using evidence to
	Lesson 1:		demonstrate that
	The Role of Gravity	Lesson Overview:	objects can affect
	Essential	Explore	other objects even
	Question:	<ul> <li>Pages 8-10- Inquiry Activity: Crater Model</li> </ul>	when they are not
	What pulls objects down?	Materials:	touching.
			5. E2U1.8
		Safety goggles	Obtain, analyze, and
≶		<ul> <li>Newspaper</li> </ul>	communicate
ed		Shallow pan	evidence to support an explanation that
ne		• Flour	the gravitational force
Wednesday		• Ruler	of Earth on objects is
ye		Pan balance	directed toward the
		Modeling clay	planet's center.
		<ul> <li>Make a Prediction: How does the size of an</li> </ul>	
		object affect the size of the crater that it	
		-	
		forms?	
		<ul> <li>Carry Out an Investigation</li> </ul>	
		Record Data on chart	
		<ul> <li>Communicate Information</li> </ul>	
		<ul> <li>Page 11- Make Your Claim: What factors affect how</li> </ul>	
		objects fall to Earth's surface?	
		<ul> <li>Students use their inquiry activity as a</li> </ul>	
		reference to make their claim and support it.	
	Notes:	Objective:	Academic
	Grade 5	Students will support an argument that gravity causes objects	Standards:
	Unit 4:	to be pulled toward the center of Earth.	5. P1U1.3
	Earth and Space	· · · · · · · · · · · · · · · · · · ·	
	Patterns	Lesson Overview:	explanation using
	Lesson 1:	Explain	evidence to
	The Role of Gravity	Academic Vocabulary:	demonstrate that
묽	Essential	•	objects can affect
Thursday	Question:	<ul> <li>Gravity- a force of attraction, or pull,</li> </ul>	other objects even when they are not
bs	What pulls objects	between any two objects.	touching.
ay	down?	<ul> <li><u>Tides</u>- the regular rise and fall of water along</li> </ul>	5. E2U1.8
		the shore.	Obtain, analyze, and
		<ul> <li>Pages 12-13- Gravity on Earth</li> </ul>	communicate
		<ul><li>Read About: The Pull of Earth's Gravity</li></ul>	evidence to support
		o Video: <i>Tides</i>	an explanation that
			the gravitational force of Earth on objects is
			directed toward the
			planet's center.

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# Notes: Grade 5 Unit 4:

Earth and Space Patterns

#### Lesson 1:

The Role of Gravity

# Essential Question:

What pulls objects down?

## Objective:

• Students will support an argument that gravity causes objects to be pulled toward the center of Earth.

#### **Lesson Overview:**

- Explain
  - Academic Vocabulary:
    - Meteor- a space rock that enters Earth's atmosphere.
    - Meteorite- a meteor that strikes Earth's surface.
  - o Page 14- Meteors and Meteorites
    - Read About: Meteors and Meteorites
  - o Page 15- Writing Connection
    - Investigator: Gravitational Waves
      - Read the Investigator article.
      - On a separate sheet of paper, write a paragraph about how the findings of Einstein and other scientists have been important in understanding how gravity works. How have the ideas of scientists in the past affected our use of technology in the study of gravitational waves?
      - Use the Cause-and-Effect graphic organizer to help.
        - Example of Causes:
          - Sir Isaac Newton explains that every object has a gravitational pull.
          - Einstein created a theory about gravitational waves.
        - Example of Effects:
          - Researchers use special technology to listen for gravitational waves.

Academic Standards:

# 5. P1U1.3

Construct an explanation using evidence to demonstrate that objects can affect other objects even when they are not touching.

### 5. E2U1.8

Obtain, analyze, and communicate evidence to support an explanation that the gravitational force of Earth on objects is directed toward the planet's center.