

Science/1st Grade
Quarter 1
Remote Learning
Practice and Enrichment Packet



ANSWER KEY



Inquiry Activity

Shadows

How does light affect the length and direction of shadows?

Make a Prediction What causes shadows to change?

Sample answer: Shadows change

as the direction of light changes.

Carry Out an Investigation

- 1 Put a craft stick in clay so that it stands up straight.
- 2 Place the clay and craft stick on a piece of paper.
- 3 Shine a light on the craft stick from the left.
- 4 Trace the shadow and label it left.
- 5 Move the flashlight to another spot.
- 6 Trace the new shadow and label it based on where the light came from.

Materials

- craft sticks
- modeling clay
- paper
- flashlight
- pencil

Observe what happens to the shadow when you move the flashlight.



- 7 **Record Data** Draw the light, stick, and shadows. Use the table.

	Shadows
First Shadow	<p>Accept all reasonable drawings. Sample answers:</p> <p>Drawings could include the flashlight shining straight on the left side of the stick and a long shadow on the other side of the stick.</p>
Second Shadow	<p>Drawings could include the flashlight shining down from directly above the stick and a very small shadow around the bottom of the stick.</p>

Communicate Information

1. Communicate How did you make a long shadow?

Sample answer: I shined the light on the stick from the side.

2. How did you make a short shadow?

Sample answer: I shined the light on the top of the stick.

3. Draw Conclusions What caused the shadows to change?

Sample answer: The direction of the light caused the shadows to change.



Inquiry Activity

How the Moon Looks

What does the Moon look like in the night sky?

Make a Prediction What shape will the Moon be in the night sky?

Sample answer: Sometimes the Moon looks like a circle, and sometimes it looks like a crescent shape.

Carry Out an Investigation

BE CAREFUL Observe the Moon outside at night with an adult.

- 1 Look at the Moon outside on a clear night.
- 2 **Record Data** Draw a picture of what the Moon looked like.
- 3 Take your picture to school. Compare it with the pictures of your classmates.

What is the shape of the Moon?



Accept all reasonable drawings.
Drawings could include a full moon.

Communicate Information

1. Communicate How did your drawing compare to your classmates' drawings?

Accept all reasonable answers. Sample

answer: They all showed the same shape of

the Moon.



Inquiry Activity

The Sun and Earth

You will investigate how Earth's movement causes day and night.

Make a Prediction How does Earth's movement cause day and night?

Materials

- stickers or sticky paper
- globe
- flashlight

Sample answer: Earth rotates. The part of

Earth facing the Sun has daytime. The part

not facing the Sun has nighttime.

Carry Out an Investigation

- 1 Put a sticker or sticky paper where you live on the globe.
- 2 Shine a light on the globe.
- 3 Spin the globe around. Let it stop by itself.
- 4 Observe where the light is shining on the globe.

The light from the flashlight shining on the globe is a model of the light from the Sun shining on Earth.



Communicate Information

3. Communicate After spinning the globe, is it daytime or nighttime where you live? How do you know?

Sample answer: It is nighttime. I know this

because the light is not shining on my sticker.

4. Is it daytime or nighttime on the other side of Earth? How do you know?

Sample answer: It is daytime. The light is shining

on that side of Earth.

Earth's Sky Changes

 Read pages 14–23 in *Earth's Sky Changes*.

Fill in the blank. Use a vocabulary word.

5. Earth is a _____ **planet** _____ that revolves or moves around the Sun.