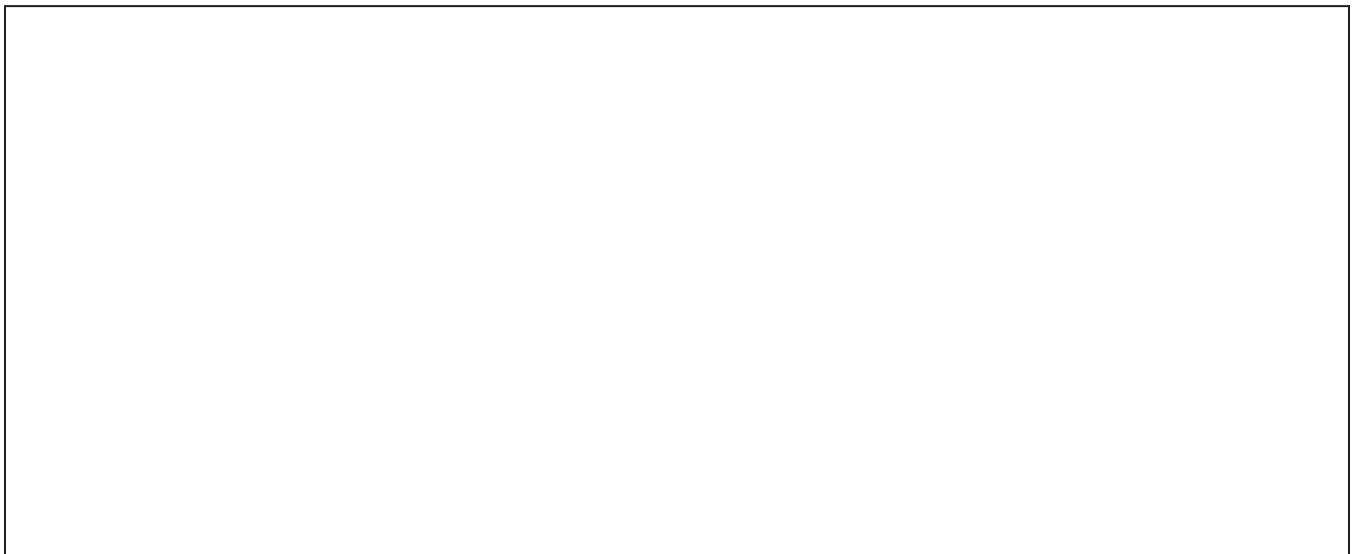


Name: _____ Date: _____

Chapter 1 Home Investigation: Animal or Plant Structure

Directions:

1. With someone from your family, choose an animal or a plant to observe. This can be:
 - a pet
 - a house plant or a garden plant
 - a bird, bug, or other small animal in your yard or in a park
 - a photograph of an animal or plant in a book or magazine
2. Together, observe the animal or plant carefully.
3. Choose one structure (body part) of the animal or plant.
4. Talk about how that structure might help the animal or plant survive.
 - Could the structure help it get food or water?
 - Could the structure help it not get eaten?
5. In the box below, draw the animal or plant using the structure to help it survive.



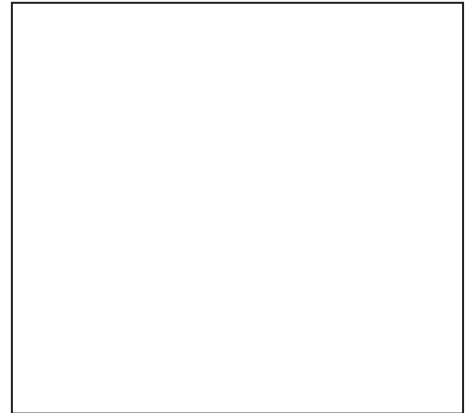
Chapter 2 Home Investigation: Camouflage Models

Directions:

1. Use the two boxes on the next page to make Camouflage Models. Cut out the two boxes.
 - One box will be a model of an animal **with** camouflage.
 - One box will be a model of an animal **without** camouflage.
2. Pick one place in your house where both model animals will live. This could be a carpet, a couch, or a house plant.
3. Color the model **with** camouflage so it is hard to see in the place you picked. Leave the model **without** camouflage white.
4. Put both model animals in the place you picked.
5. Have someone from your family try to find the model animals.
 - Tell them to pretend to be an animal that wants to eat another animal.
 - Then tell them to try to find the two squares of paper that are the models of animals they want to eat.
6. Together, talk about why it was easier to find one animal than the other animal.
7. Share with your family member what you have learned about how scientists use models like these.

Name: _____ Date: _____

Chapter 2 Home Investigation: **Camouflage Models** (continued)



Name: _____ Date: _____

Chapter 3 Home Investigation: Sharing the Mini-Book

Directions:

1. Read your mini-book out loud with someone in your family.
2. Talk about the book with your family member.
3. Have your family member help you write one idea or question they have from reading the book.

Name of person in my family:

Their idea or question:

Name: _____ Date: _____

Chapter 4 Home Investigation: Sharing Your Model

Directions:

1. On the next page, circle the animal that you chose to model.
2. On the next page, circle the defense your model showed.
3. Describe your model to someone in your family.
 - What did you include in your model?
 - What did you **not** include in your model?
4. Explain to your family member how your model showed the animal using its defense to survive.
5. On the next page, write your family member's name.
6. Have your family member help you write one idea or question they have about the animal or your model. Write this on the next page.

Name: _____ Date: _____

Chapter 4 Home Investigation: Sharing Your Model (continued)

I chose this animal for my model:

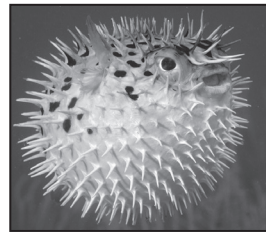
sea turtle



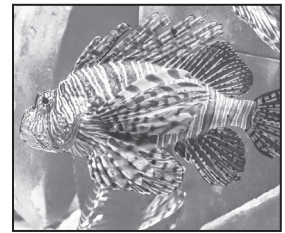
Sally Lightfoot
crab



puffer fish

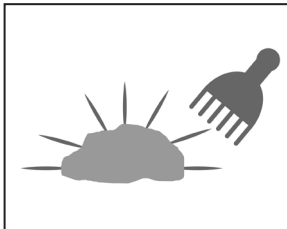


lionfish

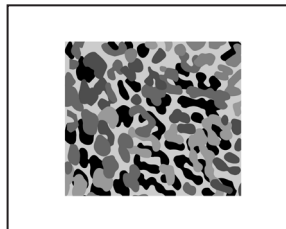


My model showed this defense:

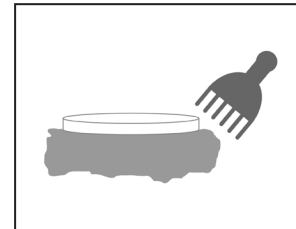
spikes



camouflage



shell or armor



Name of family member: _____

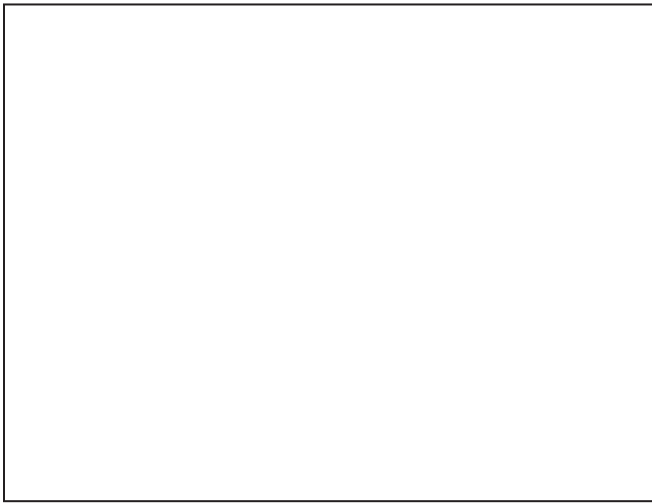
Their idea or question: _____

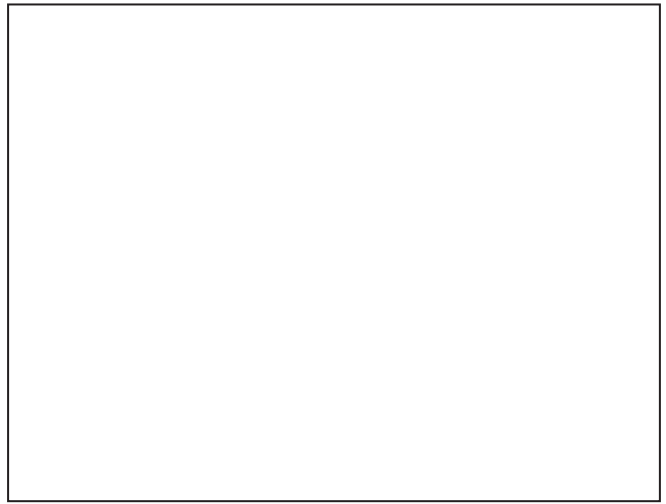
Name: _____ **Date:** _____

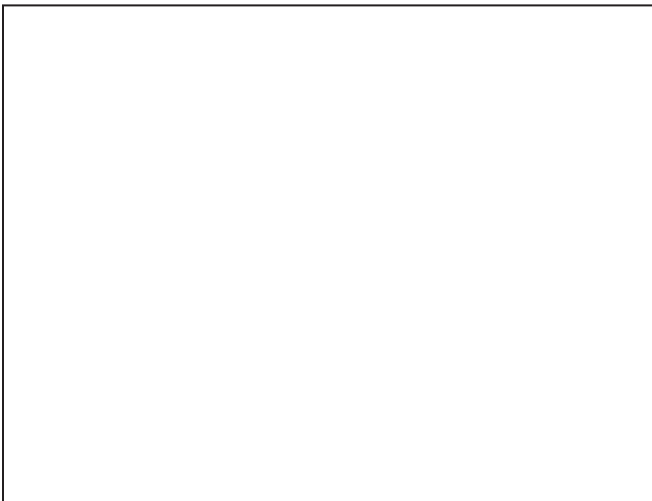
Chapter 1 Home Investigation: Light Source Hunt

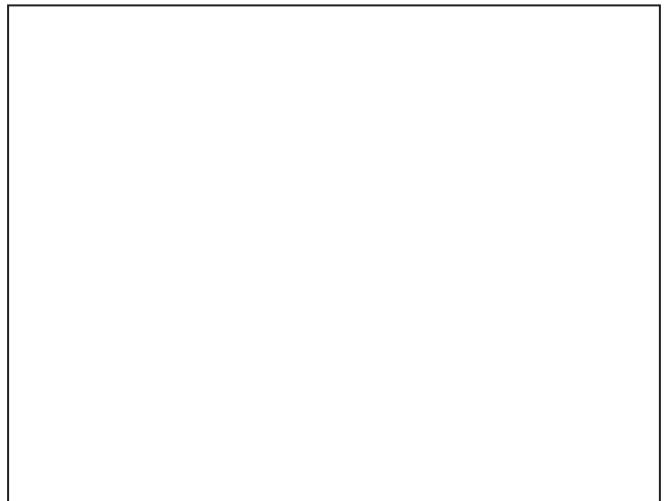
Directions:

1. Look for sources of light. You can look inside and outside.
2. In each box, draw a light source you find.
3. On the line below each box, label your drawing.









Chapter 2 Home Investigation: Looking for Light Blockers

Directions:

1. You will need a light source: a light, a lamp, or a flashlight.
2. Using your light source, look for materials in your home that can block light. Start with your hand.
3. Place the material between your light source and a surface.
4. In the first column of the table on the next page, record the materials you used.
5. In the second column, circle **yes** if the material blocked light or circle **no** if the material did not block light.
6. In the last column, use words or pictures to describe or show what the shadow looked like.

Name: _____ Date: _____

Chapter 2 Home Investigation: Looking for Light Blockers (continued)

Material	Did it block light?	What did the shadow look like?
hand	yes no	
	yes no	
	yes no	
	yes no	





Chapter 3 Home Investigation: Light Passing Through Materials

Directions:

1. You will need a light source: a flashlight, a lamp, or the sun.
2. Look for places inside or outside where you can test light passing through different materials.
3. You will need some materials to test: paper, a bedsheet, a blanket, a shirt, foil, wax paper, a window.
4. Place the material between your light source and a surface.
5. In the first column of the table on the next page, write the material or object you tested.
6. In the second column of the table, circle the amount of light that passed through.
7. In the third column of the table, color in the box to show what the surface behind the material looked like.
8. An example has been completed for you.

Name: _____ Date: _____

Chapter 3 Home Investigation: Light Passing Through Materials (continued)

Material or object	How much light passed through?	What did the surface behind the material look like?
example: paper	<div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">some</div> none all	
	some none all	
	some none all	
	some none all	

Name: _____ **Date:** _____

Chapter 4 Home Investigation: What Vibrates?

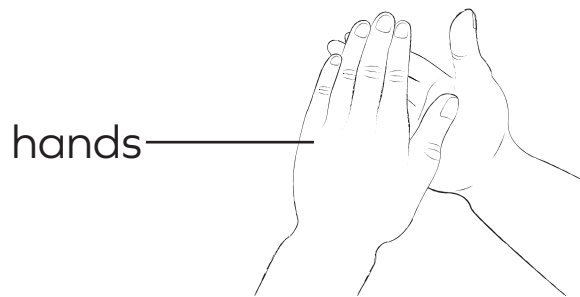
Directions:

1. Gather a few materials that you can use to make sound: rubber bands, a spoon, a cookie sheet, a plastic cup, a broom.
2. Choose one or more materials and make a sound.
3. In each box on the next page, draw the sound source.
The first box is done for you.
4. Write the words to label the sound source.
5. Write the words to label the part that is vibrating and draw a line to that part.
6. Choose one interesting example that made a sound and bring it to your class.

Name: _____ Date: _____

Chapter 4 Home Investigation: What Vibrates? (continued)

sound source: clapping



Name: _____ Date: _____

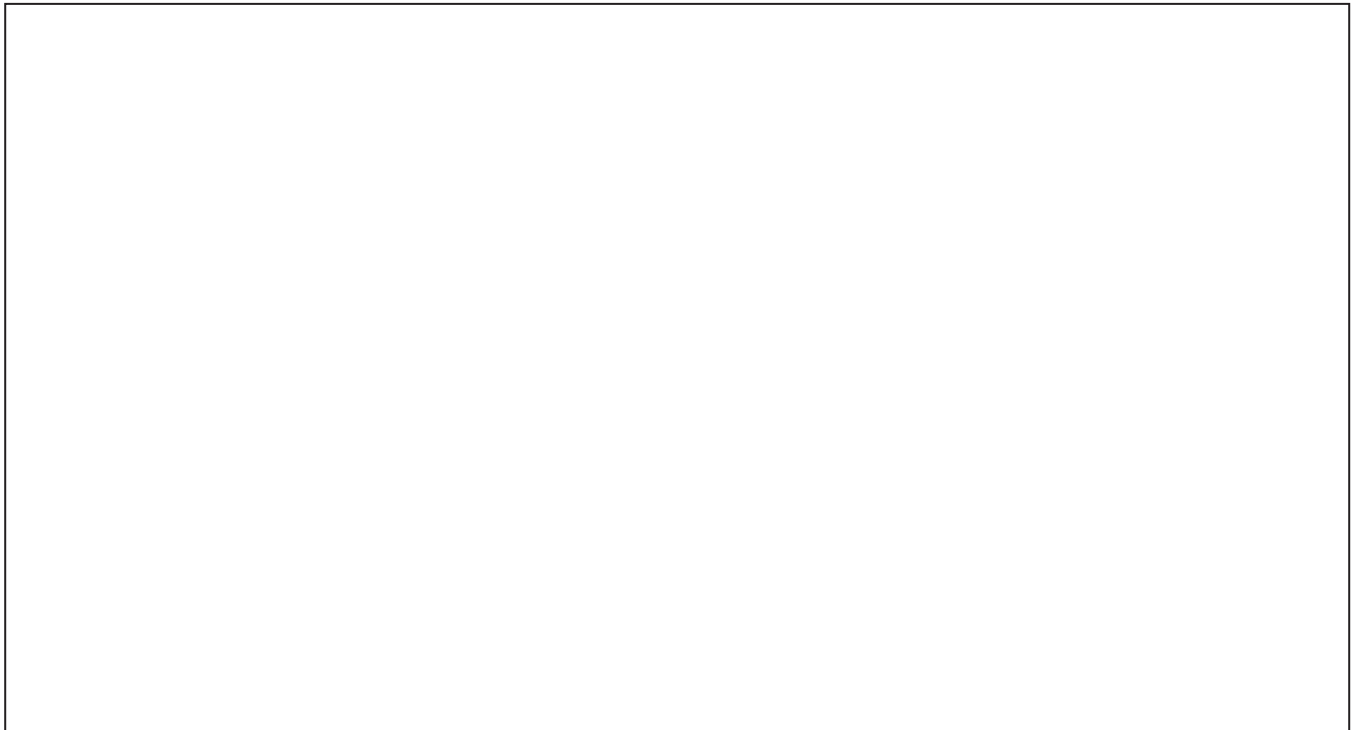
Chapter 1 Home Investigation: Sky Observations

Directions:

1. With an adult at home, go outside to observe the sky before or after school.
2. On the line below, write the time you observe the sky.
3. In the box below, draw what you observe in the sky.
4. Label your drawing.
5. Talk with the adult about what was the same or different from what you observed in your class observations.

Safety note: If the sun is in the sky, do not look directly at it when you observe.

Time: _____



Name: _____ Date: _____

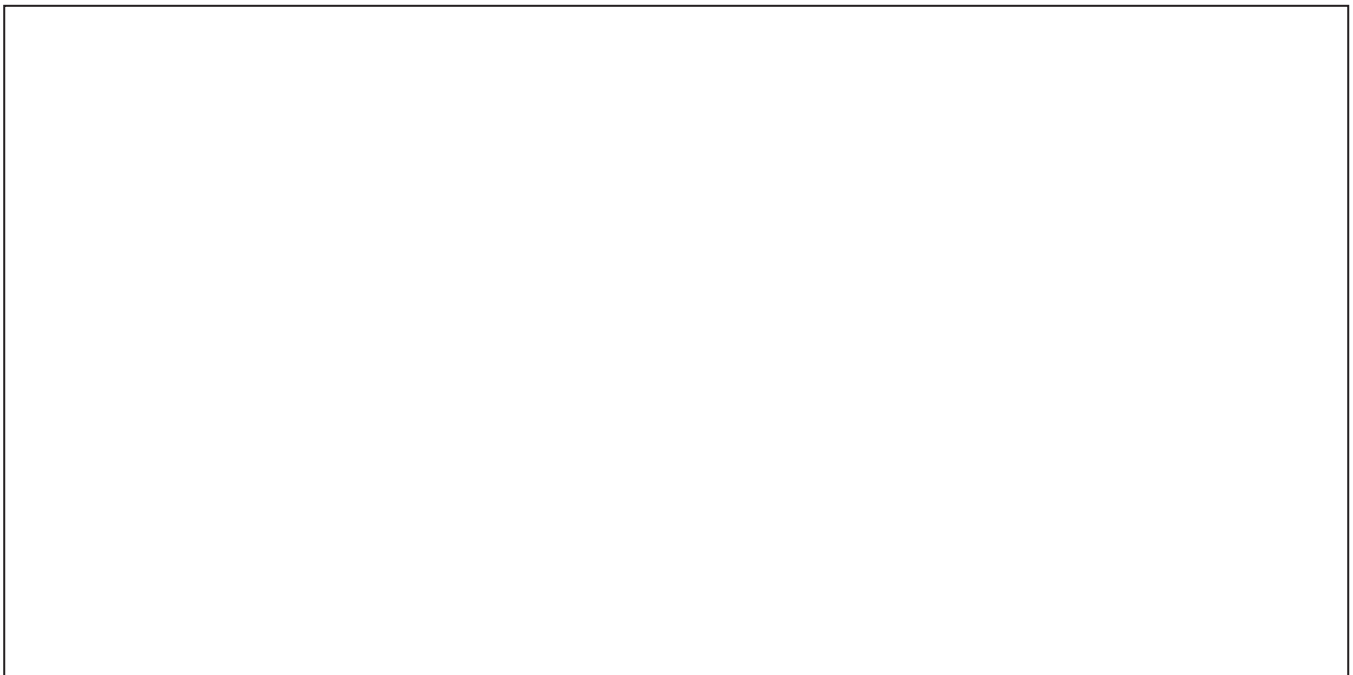
Chapter 2 Home Investigation: Daytime and Nighttime on Earth

Directions:

1. With an adult at home, go outside and observe the sky.
2. Below, circle whether it is daytime or nighttime.
3. In the box below, draw what you observe in the sky.
4. Label your drawing.
5. On the picture on the next page, draw an X to show where you think you are on Earth.
6. Explain to the adult you are with what you added to the picture on the next page and why.

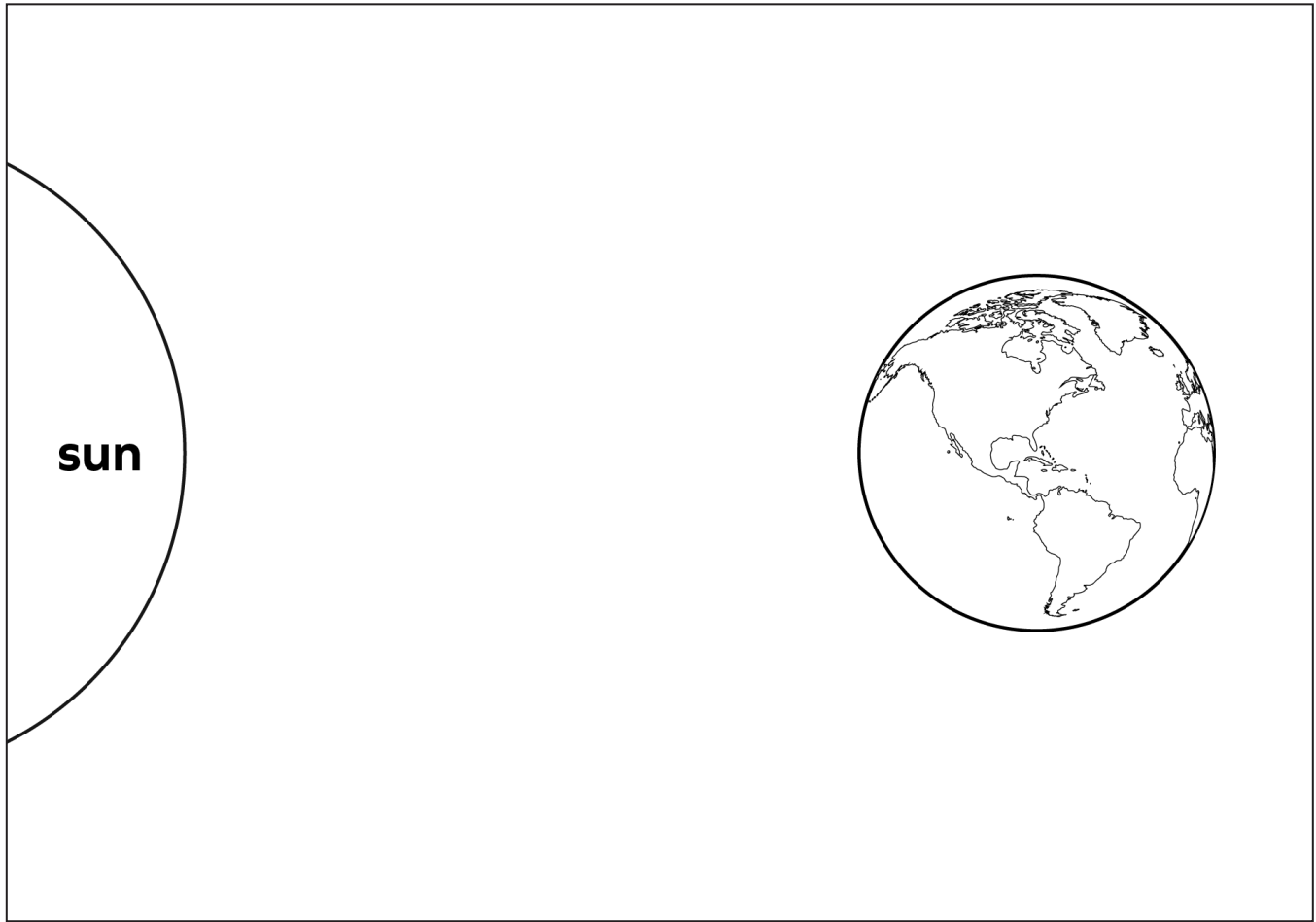
Safety note: If the sun is in the sky, do not look directly at it when you observe.

Circle one: daytime nighttime



Name: _____ Date: _____

Chapter 2 Home Investigation: Daytime and Nighttime on Earth (continued)



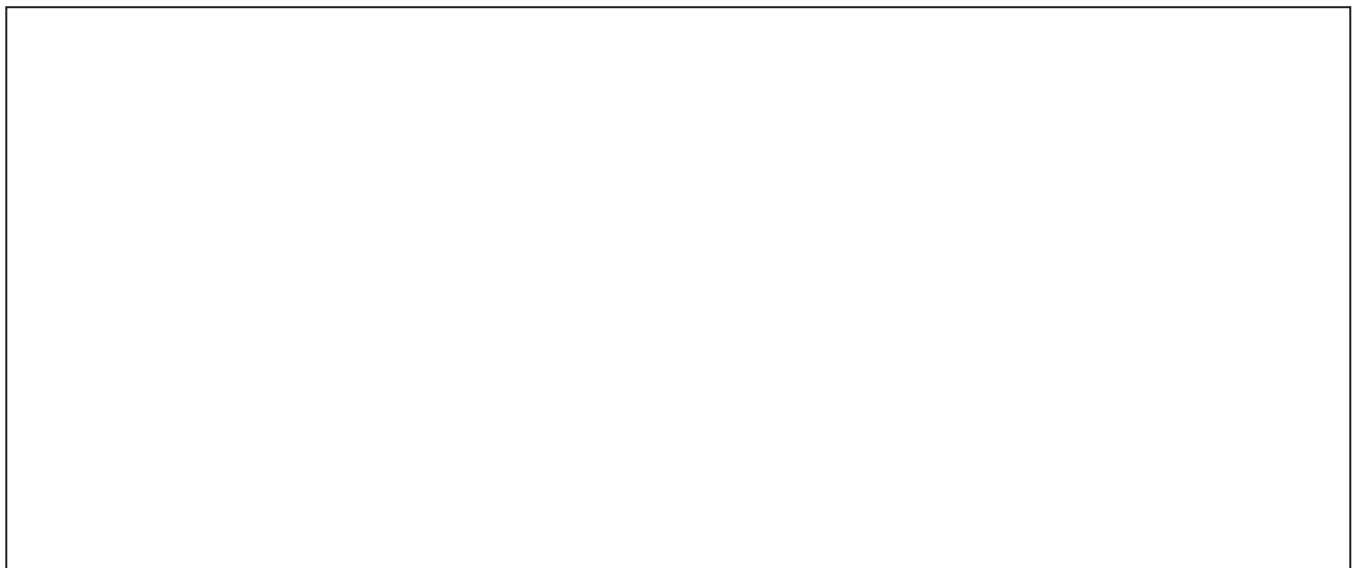
Name: _____ Date: _____

Chapter 3 Home Investigation: Nighttime Sky Observations

Directions:

1. With an adult in your home, go outside and observe the sky after dark.
2. On the lines below, write the date and time of your observation.
3. In the box below, draw what you observe in the sky. Include things such as the Moon and stars if you see them.
4. Label your drawing.
5. Observe the same part of the sky on two more nights.
6. On the next page, write the date and time of each observation.
7. In the boxes on the next page, draw what you observe in the sky each night.
8. Talk with the adult about what was the same or different about the sky each night.

Observation 1 Date: _____ Time: _____



Name: _____ Date: _____

Chapter 3 Home Investigation: **Nighttime Sky Observations** (continued)

Observation 2 Date: _____ Time: _____

Observation 3 Date: _____ Time: _____

Name: _____ Date: _____

Chapter 4 Home Investigation: Repeating Sky Observations

Directions:

1. With an adult in your home, go outside and observe the sky during the daytime.
2. On the next page, write the date and time on the lines for Observation 1.
3. Have the adult you are with point toward the sun. Circle the picture that looks most like the adult's arm.
4. Face the direction of the sun. In the box for Observation 1, draw what you observe on the horizon. Label your drawing.
5. Observe the same part of the sky on a different day.
6. On page 3, write the date and time on the lines for Observation 2.
7. Have the adult you are with point toward the sun. Circle the picture that looks most like the adult's arm.
8. Face the direction of the sun. In the box for Observation 2, draw what you observe on the horizon. Label your drawing.
9. After Observation 2, talk with the adult to help you answer the questions on the last page.

Safety note: Do not look directly at the sun when you observe.

Name: _____ Date: _____

Chapter 4 Home Investigation: Repeating Sky Observations (continued)

Observation 1: Date: _____ Time: _____



A

very low



B

low



C

medium-high



D

high



E

very high

Name: _____ Date: _____

Chapter 4 Home Investigation: Repeating Sky Observations (continued)

Observation 2: Date: _____ Time: _____



A

very low



B

low



C

medium-high



D

high



E

very high

Name: _____ Date: _____

Chapter 4 Home Investigation: **Repeating Sky Observations** (continued)

What did you notice about where the sun was in the sky on these two different dates?

What in the sky looked the same each time you observed?
Why do you think it was the same?
