

Name: _____ **Date:** _____

Chapter 1 Home Investigation: Neighborhood Walk

Directions:

1. Go on a walk with someone in your family to find what lives near your home.
2. Carefully observe one animal and one plant.
(Hint: Remember that things like ants and spiders are animals. Weeds, grass, and trees are all plants, too!).
3. Draw a picture of one plant and one animal in the boxes.
4. Use the lines below each box to record, or write, what you observed with your senses:
 - What did the animal or plant sound like?
 - What did the animal or plant smell like?
 - If it was safe to touch, what did the animal or plant feel like?

Name: _____ Date: _____

Chapter 1 Home Investigation: Neighborhood Walk (continued)

Animal



Plant



Name: _____ **Date:** _____

Chapter 2 Home Investigation: Growing Garlic

Directions:

1. Talk with someone in your family about what you think your garlic clove will need to grow well. Put the garlic in a place where you think it will grow.
2. Observe your garlic. In the first box, draw what the garlic looks like today. Write about your observation on the lines below the box.
3. In two days, observe your garlic again:
 - Talk with your family member about any changes, or new parts, on your garlic.
 - Use the box to draw your observation of the garlic.
 - Use the lines to record, or write, the names of any new plant parts.
4. In two more days, observe your garlic again. Be sure to talk with your family member, draw a picture, and write on the lines to record what you observe.
5. After two more days, repeat the observation process one last time.

Name: _____ Date: _____

Chapter 2 Home Investigation: Growing Garlic (continued)

Observation 1

Observation 2

Observation 3

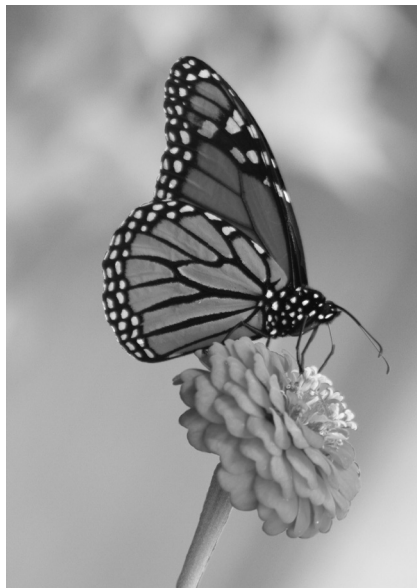
Observation 4

Name: _____ Date: _____

Chapter 4 Home Investigation: Monarch Habitats

Directions:

1. Use the pictures below to talk with someone in your family about what you have learned about where monarchs live, what they eat, and how they change over their lives. Your family member can ask you some of the questions below to help you.



Helpful questions:

- How do monarchs change over their lives?
- What do monarchs eat at different times in their lives?
- Where are some of the places that monarchs live?
- A habitat is a place where a living thing can get what it needs to live and grow. What should be in a habitat for monarchs?

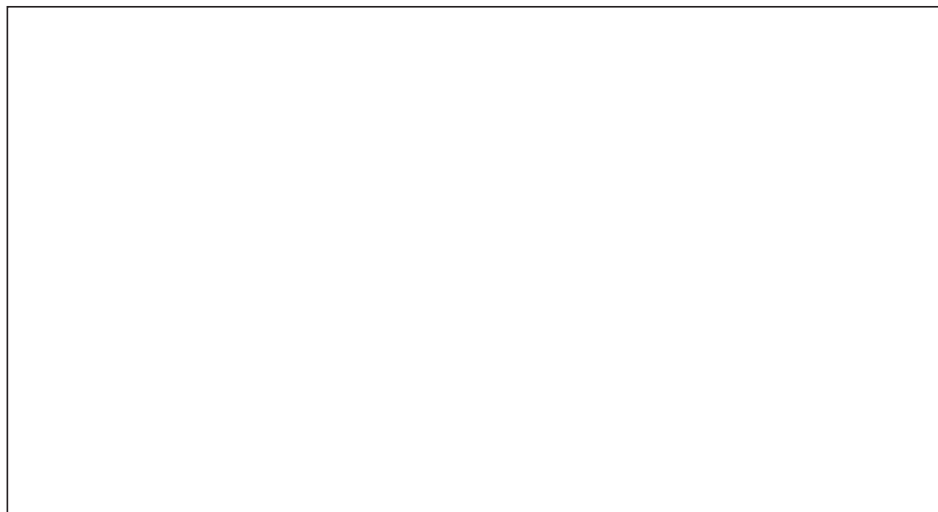
Needs of Plants and Animals—Lesson 4.1 (optional)

Name: _____ Date: _____

Chapter 1 Home Investigation: Movement Hunt

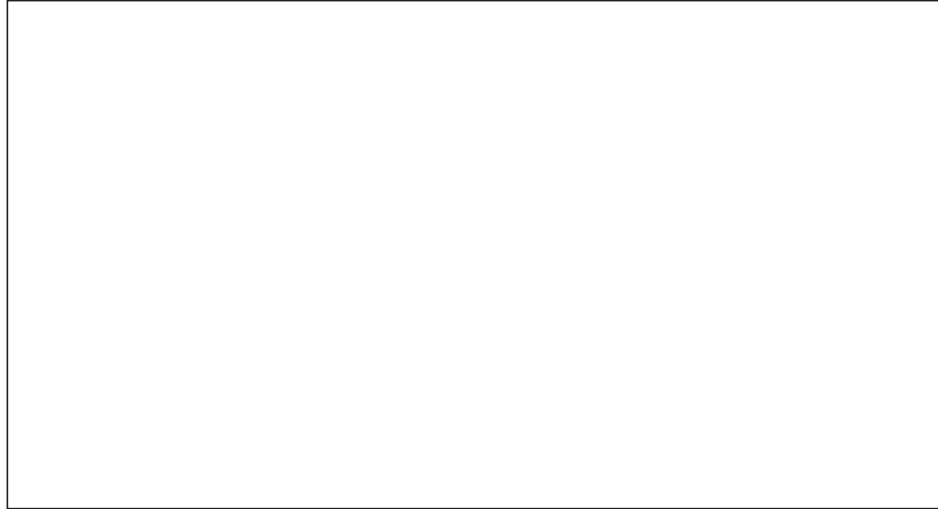
Directions:

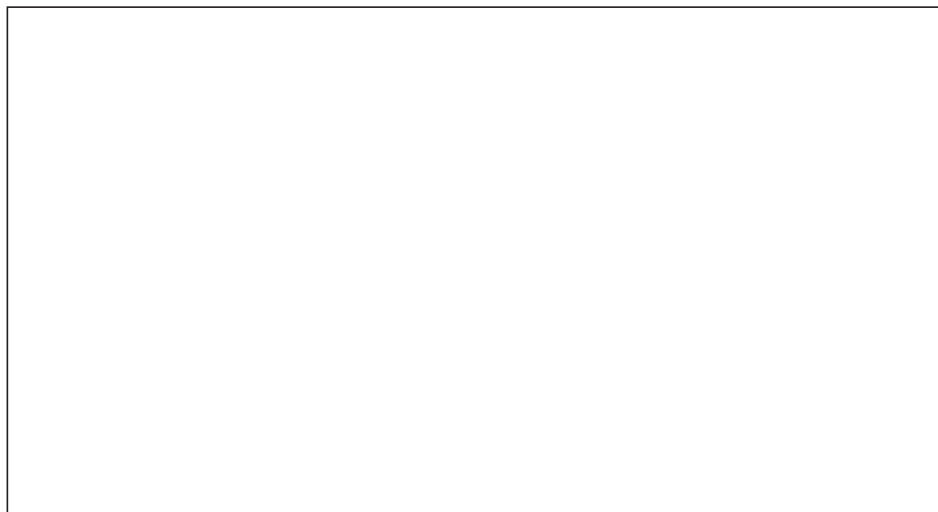
1. Look for objects that you can make start to move.
2. Try to make each object start to move.
3. In each box, draw an object that you made start to move.
4. On the lines below the box, work with someone in your family to write about the object and how you made each object start to move.



Name: _____ Date: _____

Chapter 1 Home Investigation: Movement Hunt (continued)





Name: _____ Date: _____

Chapter 2 Home Investigation: Making a Forces Kit

Directions:

1. Work with someone in your family to make a Forces Kit.
Think of objects in your house that you can push or roll (such as rolled-up socks, fruit, toys, or cans) to practice exerting forces.
2. Put three or more different objects that can roll into a box or a bag.
3. Choose one item from the box and exert a gentle force on it.
Then, **using the same item**, exert a strong force on it.
4. Choose a different item and try exerting a gentle and a strong force on it. Let your family member try.
5. Talk to your family member about what you noticed.
For example:
 - How did the object move when you exerted a gentle force?
 - How did the object move when you exerted a strong force?
6. Bonus question: How can you make the object move fast?
How can you make the object move slowly?

Name: _____ Date: _____

Chapter 3 Home Investigation 1: More Practice with a Forces Kit

Directions:

1. Use the Forces Kit you made in the Chapter 2 Home Investigation. If you have not already created one, work with someone in your family to make a Forces Kit. Think of objects in your house that you can push or roll easily (rolled up socks, fruit, toys, or cans) to practice exerting forces.
2. Put three or more different objects that can roll into a box or a bag.
3. Choose one item from the box or bag and, with a family member taking turns or participating, exert a force on it so that it moves fast in one direction. Then, **using the same item**, exert a gentle force on the object in the opposite direction, a push or a pull, to make it slow down.
4. Try the activity again, this time exerting a stronger force in the opposite direction to make the object go even slower.
5. Try the same activity with another object from the Forces Kit.
6. Talk to your family member about what you noticed.

For example:

- How did the object move when you exerted a gentle force in the opposite direction of the fast moving object?
- How did the object move when you exerted a stronger force in the opposite direction of the fast moving object?

Name: _____ **Date:** _____

Chapter 3 Home Investigation 2: Hitting Targets

Directions:

1. Locate the Forces Kit that you made with someone in your family.
2. Find a place to sit down where there is some room around you. You will stay in this spot while you try to hit different targets.
3. Choose an object from your Forces Kit.
4. Have someone in your family choose a spot on the the floor for you to move your object to. This is your target. Your family member might want to mark the spot with a piece of paper.
5. Try to move your object so it stops on the target. If you do not reach the target the first time, try again.
6. Talk with your family member about the force you used to move the object to the target. Be sure to say if the strength is gentle or strong and the direction of the force you used.
7. Have your family member change the target. Use the same object to try to hit the target.
8. Repeat the process at least four more times with the same object and targets at different distances and in different directions.
9. Choose another object from your Forces Kit and try to move this object to each target.

Name: _____ **Date:** _____

Chapter 4 Home Investigation: Making Objects Change Direction

Directions:

1. Get your Forces Kit.
2. Work with someone in your family to find five still objects in your home. These should be objects you cannot move or things you can hold still.
3. Try rolling different objects from your Forces Kit toward each still object.
4. See if you can make the moving object change direction.
5. Talk with your family member about the movement you observed.

Name: _____ Date: _____

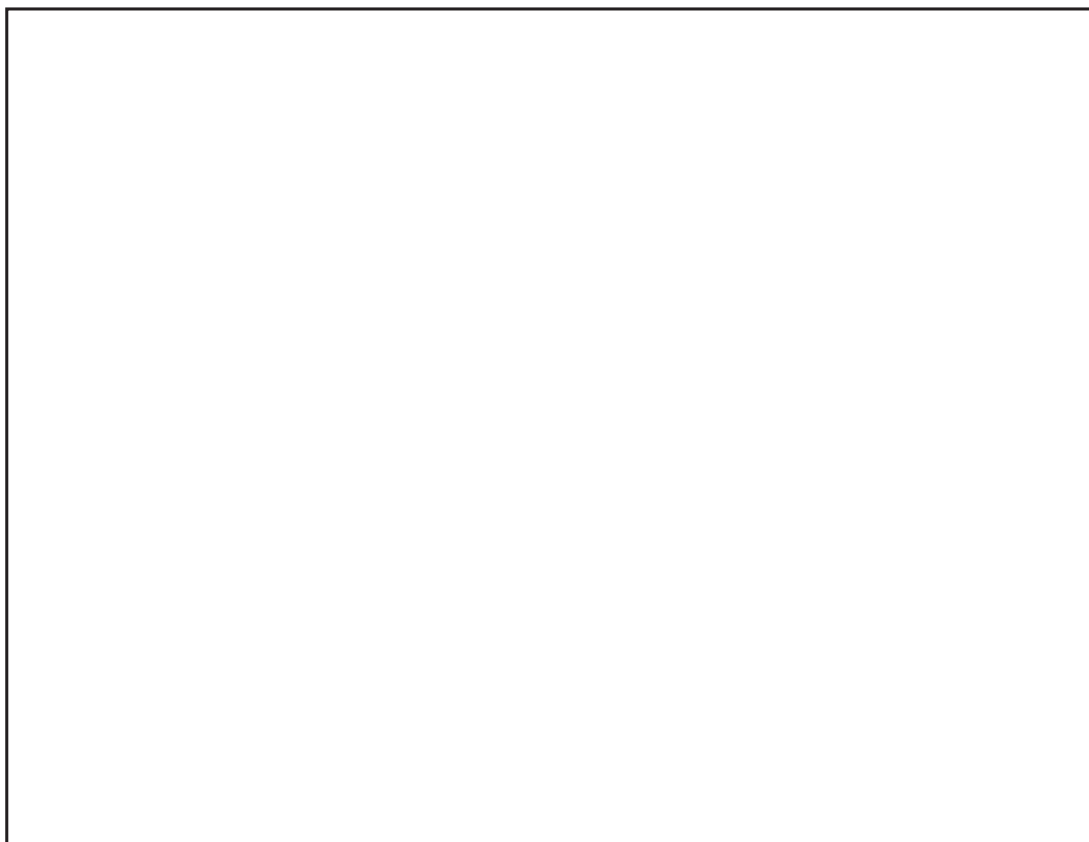
Chapter 6 Home Investigation: Home Forces Tour

Directions:

1. Look around your home for objects that are moving.
2. Take turns with someone in your family to point out where a force is being exerted. You can remind your family member that every time we see an object move, that is evidence of a force being exerted.
3. Explain your evidence for how you know there is force being exerted. For example, "I think a force is being exerted on the _____. My evidence is that I see the _____ moving."
4. Pick one object you observed and draw the object in the box.
5. On the lines below the box, work with your family member to write about the object and where you found evidence of a force.

Name: _____ Date: _____

Chapter 6 Home Investigation: Home Forces Tour (continued)



Name: _____ Date: _____

Chapter 1 Home Investigation: Observing Weather

Directions:

1. With someone from your family, go outside to a place where you can observe the sky.
2. Take turns describing the types of weather that you observe.
3. Take turns describing the temperature that you feel.
4. In the box on the next page, draw the weather that you observed.
5. With your family member, write about the weather you observed. You can use words in the box below to help you.

Words that describe weather:

sunny	cloudy	windy	rainy	snowy
cold	cool	warm	hot	

Name: _____ Date: _____

Chapter 1 Home Investigation:

Observing Weather (continued)

My weather observation:



Name: _____ Date: _____

Chapter 2 Home Investigation:

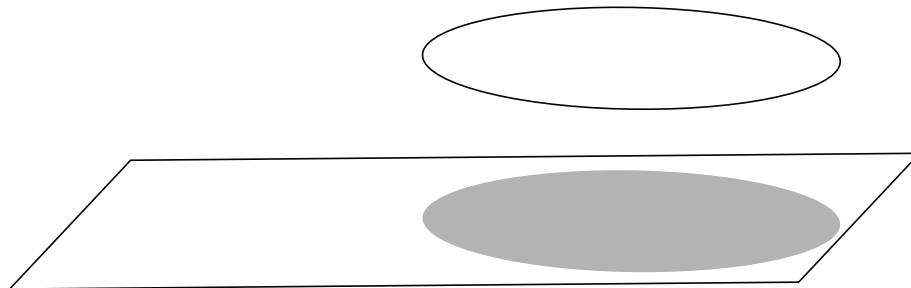
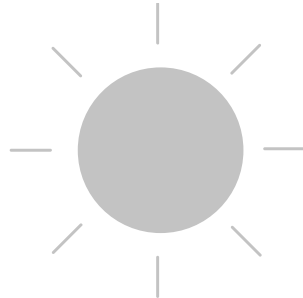
Sunlight and Shade

Directions:

1. With someone from your family, find a surface outside that is partly in sunlight and partly in the shade.
2. Make a prediction. Tell each other which part of the surface you think will feel warmer and why you think it will feel warmer.
3. Feel each part of the surface with your hands. Describe what you observe to each other.
4. On the next page, put a ✓ in the first row under **In the sunlight** or under **In the shade** to show which part of the surface was warmer.
5. Find two more surfaces that are partly in sunlight and partly in the shade.
6. For each surface, make a prediction, then observe, and then put a ✓ in the next rows of the table under **In the sunlight** or under **In the shade**.

Name: _____ Date: _____

Chapter 2 Home Investigation: Sunlight and Shade



In the sunlight	In the shade

Name: _____ Date: _____

Chapter 3 Home Investigation: Time in the Sunlight

Directions:

1. With someone from your family, go outside and choose a surface that has sunlight shining on it all day. Plan to observe the surface in the early morning, late morning, and mid-afternoon.
2. Use your hand to touch the surface. Decide what temperature it feels like each time you observe.
3. Record the temperature of the surface each time you observe it by coloring in the box for the temperature at different times during the day.
4. At the end of the day, look at your data and talk about what you notice.

Time of day: Early Morning Late Morning Mid-afternoon

Temperature:

very hot
hot
warm
cool
cold
very cold

very hot
hot
warm
cool
cold
very cold

very hot
hot
warm
cool
cold
very cold

Name: _____ Date: _____

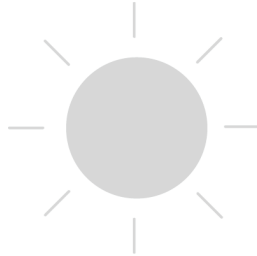
Chapter 4 Home Investigation: Dark and Pale Surfaces

Directions:

1. With someone from your family, find or set up a place inside or outside where sunlight is shining on a surface that has a dark-colored area and pale-colored area.
2. Make a prediction. Tell each other whether you think the dark or pale part of the surface will feel warmer. Explain why.
3. Feel each part of the surface with your hands and describe to each other what you observe.
4. On the next page, make a ✓ under **Dark** or **Pale** to show which was warmer.
5. Find two more surfaces that have a dark-colored area and a pale-colored area.
6. For each surface, make a prediction, then observe, and then put a ✓ in the next rows of the table under **Dark** or **Pale**.
7. Look at your data and talk about what you notice.

Name: _____ Date: _____

Chapter 4 Home Investigation: Dark and Pale Surfaces (continued)



Dark	Pale

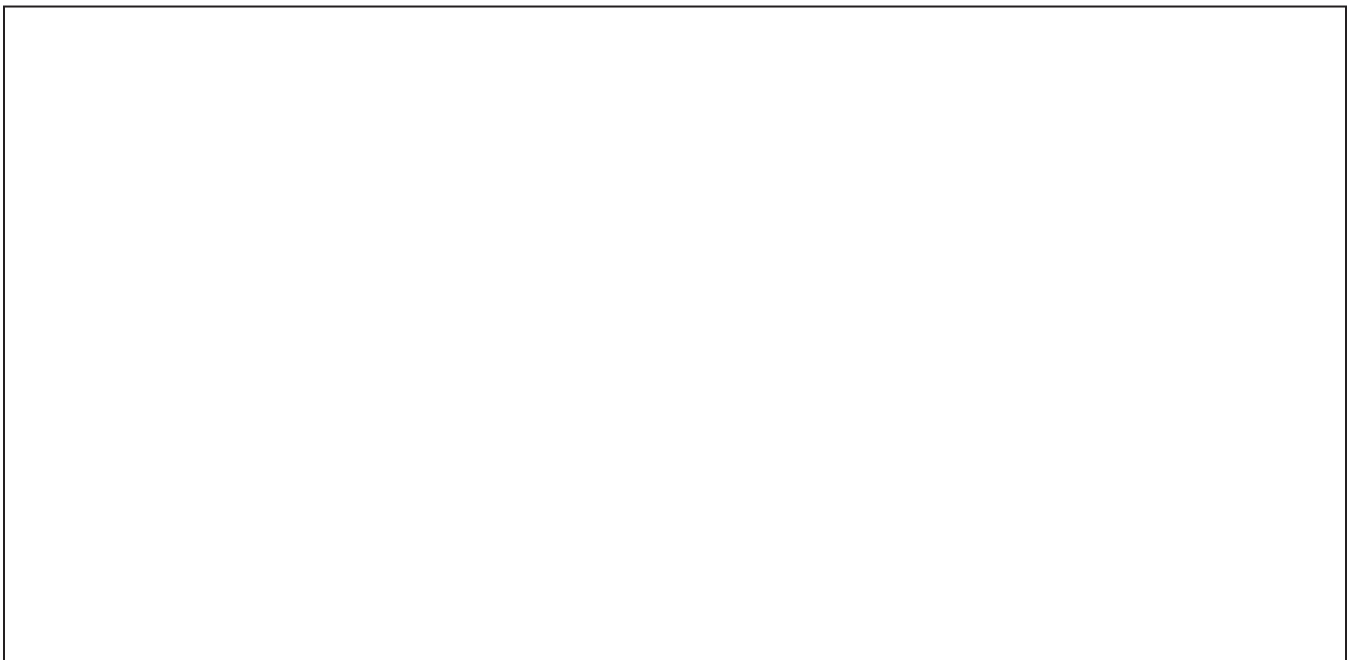
Name: _____ Date: _____

Chapter 5 Home Investigation: Preparing for Severe Weather Where You Live

Directions:

1. Find someone in your family who knows what the weather is like in the place where you live.
2. Ask your family member to tell you about types of severe weather that happen where you live. How does the weather get very strong or dangerous?
3. In the box below, draw the kinds of severe weather your family member describes.
4. Ask your family member to tell you about ways people prepare for that severe weather so they are safe or comfortable. On the next page, draw how people prepare.
5. On the next page, write about how people prepare for severe weather.

Severe weather



Name: _____ Date: _____

Chapter 5 Home Investigation: Preparing for Severe Weather Where You Live (continued)

How people prepare for severe weather