Roly-Poly Round-Up

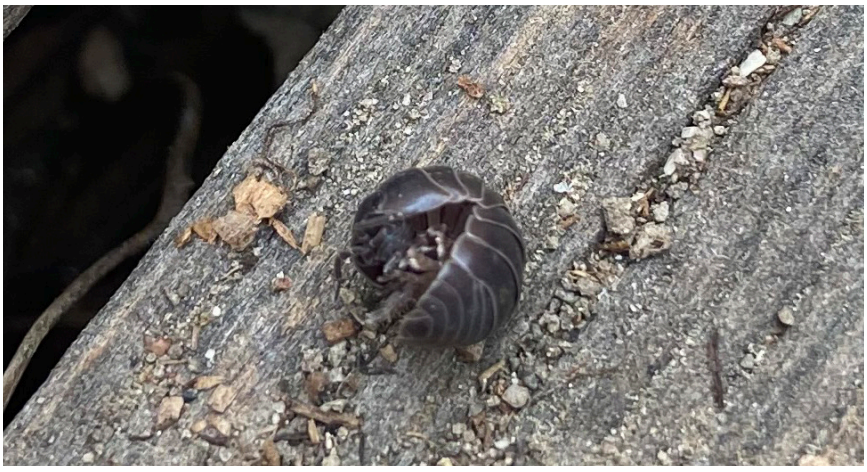
Objective: Learn all about pill bugs or roly-polies, crustaceans that live in your backyard. Discover their habitat needs and behaviors through reading about them and observing them in real life.

Background: Roly-polies are known by many common names, like pill bugs, potato bugs, and doodle bugs. Although many of their names contain "bug," the truth is that roly-polies aren't bugs at all. They are crustaceans, which make them much more closely related to lobsters, crabs, and shrimp. The name "roly-poly" comes from their ability to roll into a ball. Roly-polies are originally native to Europe, but they have naturalized to North America because their habitat is similar.

Materials:

- Markers or colored pencils
- Small paintbrush
- Open plastic container
- Magnifying lens (optional)

Activity: Follow the instructions on pages 2 and 3 to do your own roly-poly investigation. As you watch your roly-poly, you will draw and write about it and its habitat. Think about why a roly-poly rolls into a ball as you complete your observation.



Find and Observe a Roly-Poly

Have you ever seen a roly-poly before? They're also called pill bugs, doodle bugs, or potato bugs. Roly-polies can be found just about anywhere! They live in decaying plant matter in forests, meadows, and even your backyard. Let's find a roly-poly!

Find a place outside covered with dead leaves, mulch, or other brown plant matter. They are about half an inch long, or about the length of your fingernail.

When you find one, draw it below. Draw its habitat, too. Write four things you observe about the roly-poly and its habitat.

I observe:

1.

2.

3.

4.

Try to count the number of legs the roly-poly has. How many did you count? _____

Insects have 6 legs. Crustaceans usually have 10 - 14 legs. Is a roly-poly an insect or a crustacean? Why?

Roly-Poly Roll-Up

Now that you've found a pill bug, let's observe it more closely with a science experiment. Follow the steps below!

1. Gently pick up a roly-poly and place it in the open container. You may add a few leaves or some mulch to make it feel more at home.
2. When you pick up the roly-poly, you may notice that it rolls into a ball. If it doesn't, brush the roly-poly with the soft end of the paint brush until it rolls up. Try to brush it softly to avoid hurting it.
3. Watch the roly-poly closely while it is in a ball. If you have a magnifying lens, you can use it to see the roly-poly up close.
4. Slowly, the roly-poly will unroll. Watch what happens and answer the questions below.
5. When you are done, put the roly-poly back where you found it.

Questions

Draw the roly-poly as it looked when it was rolled up.

Why do you think the roly-poly rolled up?

What did you learn about the roly-poly by watching it?

What is one question you have about roly-polies?

Experimental Design

What is a pill bug's favorite place to live? Let's do a science experiment to figure it out.

1. Choose 3 objects to place outside that you think a roly-poly might like. Write the name of each object in the columns below.
2. Every week, record how many pill bugs you find under each object. Record what you see for 4 weeks.
3. At the end of the experiment, add up each column of your data to see which object the roly-polies liked the most.

	Object 1	Object 2	Object 3
Week 1			
Week 2			
Week 3			
Week 4			

Pre-Question

Which object do you think will have the most pill bugs? The least? Why?

Post-Questions

The object with the most roly-polies was _____.

Why do you think the roly-polies behaved the way they did?