



Wonder Worms

Introduction

In *Under One Rock: Bugs, Slugs and Other Ughs*, author Anthony Fredericks uncovers a mini-habitat of creatures who live upon and within the soil. In this activity, students will observe how earthworms aerate the soil by constructing underground tunnels.

Materials Needed

- ◆ Large wide-mouthed jar
- ◆ Tin can
- ◆ Gravel or small pebbles
- ◆ Soil
- ◆ 5 or 6 earthworms

Procedure

1. Stand the can in the middle of the glass jar.
2. Place a layer of gravel or small pebbles about 1/2 inch deep on the bottom of the jar, between the can and the jar sides.
3. Fill the jar with garden soil up to the height of the tin can.
4. Place the worms on top of the soil.
5. Wrap the dark construction paper around the outside of the jar to keep out the light (Check the condition of the soil every so often and moisten it as needed.)
6. The worms will begin burrowing into the soil. After several days they will have dug a series of tunnels. Students will be able to see these tunnels by carefully removing the construction paper from the sides of the jar. (Have students replace the construction paper after observing their work so the worms will continue to tunnel in the darkness.)
7. Students should be able to watch the worms behavior without harming them, for 3 or 4 weeks, but then they should be returned outside.

Key Concepts

- ◆ Soils have different properties and abilities to support plants.
- ◆ Plants are the base of an ecosystem.
- ◆ All animals depend on plants.

For standards correlation please see our website.

Nature Connections

- ◆ Worms feed by taking soil through their bodies, creating tunnels as they go. These tunnels aerate the soil, providing plants with the oxygen they need to grow.
- ◆ Worms can eat their weight in soil each day. Over 1 million worms may be present in one acre of soil, and these worms can produce 700 pounds of castings each day. Ask children to estimate how much food waste they produce each day. What happens to it? What ways can food waste and other waste be recycled?

Additional Resources

Interesting Facts about Worms

<http://urbanext.illinois.edu/worms/facts/index.html>

Exploring Worms

<http://www.thinkingfountain.org/w/worms/worms/worms.html>

Teacher Worm Resources

<http://www.learner.org/jnorth/search/Worm.html>

