

Life Under a Log

Objectives:

Students identify decomposers and the different components of soil. Students explain the roles of decomposers in the ecosystem and the relationship between soil and plants.

Time: 1 hour

Materials:

- Gloves
- Plastic containers (1-quart size is good)
- Shovels or other digging utensils (large spoons work well)
- Soil or compost from the garden area
- Magnifying glasses
- Paper
- Crayons and pencils
- Life under a Log worksheet and clipboard (optional)

Procedure:

1. Begin with a discussion of the following topics:

- What is a garden?
- What do plants need to grow?
- Why do plants need soil?
- What is soil made of?

2. Explain that today they are going to look at soil. Although soil may look like it is just made up of dirt, it is actually a complex mixture of rock particles, organic matter and microorganisms. As soil organisms feed on organic matter in the soil, it becomes more broken down, or decomposed. Another word for decomposed organic matter is compost. Decomposers include Bacteria, Fungi, and insects that eat dead plants and animals. By doing this, they recycle them into chemical nutrients like carbon and nitrogen that are released back into the soil, air and water.

3. Give each child or team of children a collecting container and the Life Under a Log worksheet (clipboards optional). Point out places where they can dig in the garden. Ask them to collect things that they find in the soil and tally the number of each decomposer they find.

4. When children have had a chance to dig for 10 or 15 minutes, bring the group back together. Go around the circle and ask children to share their findings.

5. Ask children the following questions:

- How many did you find of each decomposer?
- Where did you find each decomposer? (be descriptive)
- Does this decomposer help plants? How?
- Does it help make soil? How?
- Is it living or non-living? If dead, did it used to be living?



Life under a Log

First, feel the soil. Is it moist or dry? _____

Feel the texture of the soil – does it feel like clay or sand? _____

What color is the soil? _____

Does the soil have rocks in it? If so, are they small, medium or large? Are there a few rocks or many? _____

Does the soil have leaves or other organic matter in it? How much? _____

How many decomposers can you find?

Insects or invertebrates



ants



earth worms



millipedes



pill bug

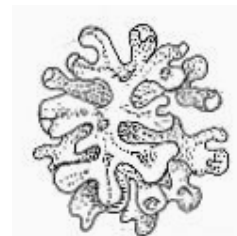


grub

Fungi



mushrooms



lichen