



Ride the Wild Leaf Cycle

Science

Purpose

Students will understand the importance of decomposition in the healthy soils cycle and allow students to learn the steps of decomposition in the environment.

Time: 1 hour

Level: Elementary

Materials

- ☐ “Ride the Wild Leaf Cycle” worksheets A and B
- ☐ Scissors
- ☐ Glue
- ☐ Crayons

Background

We are part of a living and dying world. Plants and animals are born, grow old, and die. Other plants and animals take their places. As each living thing dies, it decays and returns to the soil. One plant’s death may make it possible for new plants to grow where they could not grow before. The relationships between plants and their environment is known as ecology.

Leaves that fall to the ground in the autumn are a very important part of the forest ecology, or nutrient cycle. The leaves lie on top of others that fell in previous years. This is called forest litter, or the understory. Winter rains and snows keep the leaves wet so the decomposers can do their work. The decomposers are tiny organisms living under the piles of leaves, in the dirt. Some of them are so small you can’t see them without a microscope. You are seeing thousands of decomposers all massed together when you see fungus or mold. The decomposers release minerals from the dead leaves into the soil. In the spring, new plants use those minerals to grow new leaves.

Activity Procedures

1. Hand out student worksheets and share background material.
2. Have students read about the leaf cycle on worksheet A and look at the picture on worksheet B.
3. Instruct students to color their worksheets and then cut out the leaves on student worksheet A and glue them over the appropriate number on student worksheet B.

Vocabulary

decomposer—an organism that breaks dead plants and animals down into simple inorganic elements which can be returned to the atmosphere and soil

ecology—the science of relationships between organisms and their environments

inorganic—having to do with things not usually classified as organic

mineral—a solid, inorganic material that occurs naturally in the Earth’s crust

nutrient cycle—the process by which organisms that die feed organisms that are alive so those organisms can produce new organisms and then, in turn, die to feed new organisms

organic—having to do with living things

organism—a living plant or animal

understory—the layer of decomposed and decomposing leaves on the forest floor

Name _____

Ride the Wild Leaf Cycle - A

1. Read the story about the leaf cycle. Then number the maple leaves to show the correct order of steps in the leaf cycle. Color the leaves in autumn colors.
2. Cut the leaves out and glue them where they belong on the leaf cycle on worksheet B.

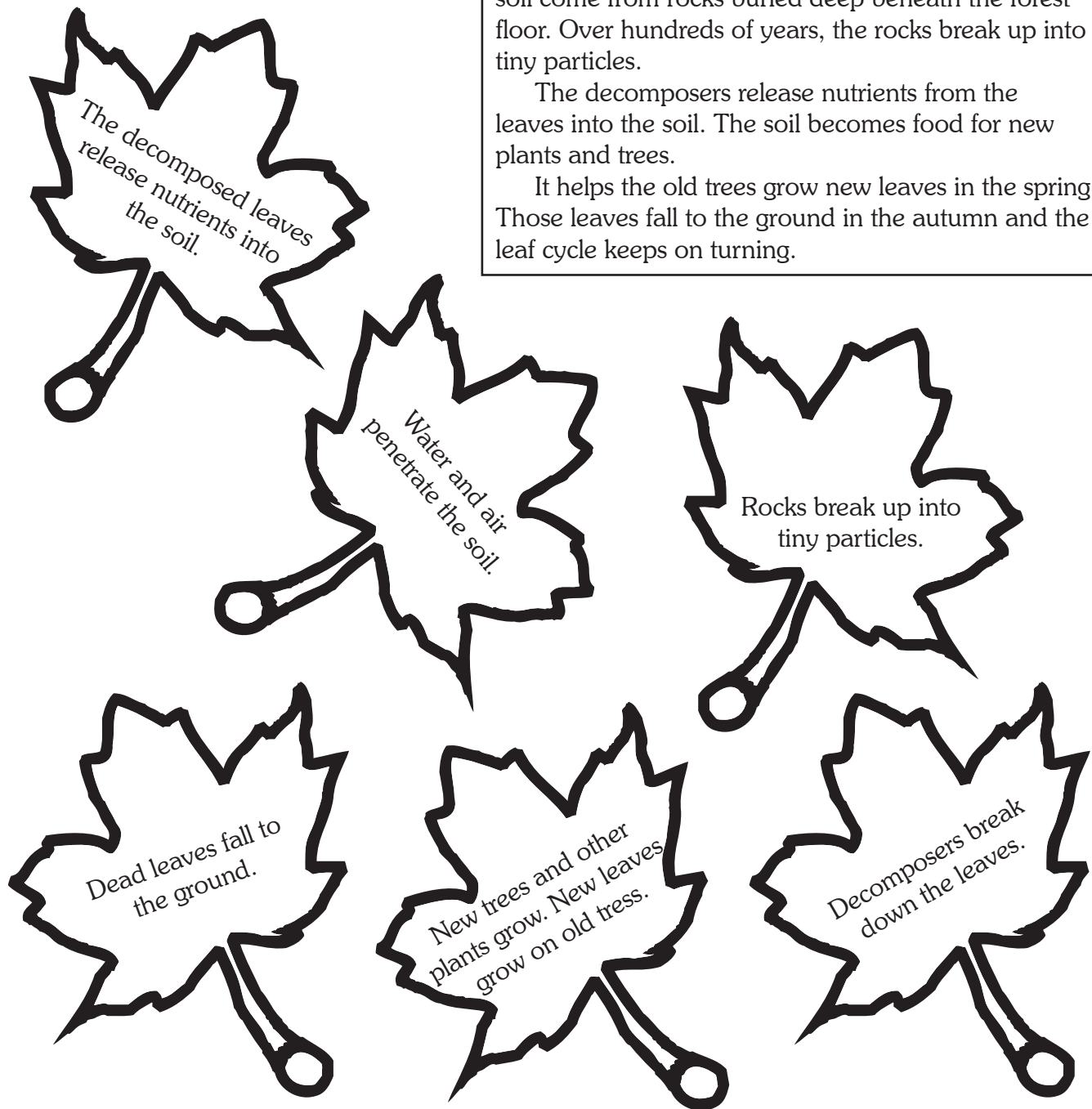
The Leaf Cycle

What happens to the leaves when they fall to the ground in the autumn? In the forest they go for a ride on the leaf cycle.

After the leaves fall to the ground, decomposers go to work, breaking the leaves down into food for the soil. Rain and snow help the decomposers do their work. Air enters the soil to do its part. Minerals for the soil come from rocks buried deep beneath the forest floor. Over hundreds of years, the rocks break up into tiny particles.

The decomposers release nutrients from the leaves into the soil. The soil becomes food for new plants and trees.

It helps the old trees grow new leaves in the spring. Those leaves fall to the ground in the autumn and the leaf cycle keeps on turning.



Name _____

Ride the Wild Leaf Cycle - B

Color the picture. Cut out the leaves from worksheet A and glue them in the correct place below. You may turn the leaves any way you wish to make them fit.

