



UNIT 7: ENVIRONMENT

Compost It!

Grade level: Primary

**NATIONAL
STANDARDS**
NL-ENG.K-12.6
NS.K-4.3
NS.K-4.4

Student Learning Objectives

By the end of this lesson, students will be able to:

1. Define composting.
2. Demonstrate how to compost.
3. Define recycling.

Time: 50 minutes

Tools, Equipment, and Supplies: Writing surface, a variety of organic matter—from leaves and twigs to food scraps, a waterproof container—an old milk carton will work, soil, water, a large spoon

Key Term(s): Composting
Recycling

Background Information

An important part of the life cycle is decomposition, defined as the process of breaking down dead plants and animal tissues and returning the nutrients to the soil. If dead plants and animals did not decompose, they would pile up. Decayed plant and animal matter is called humus or compost. Humus is rich in minerals and organic matter. It is returned to the soil and is important to a plant's roots.

Interest Approach

Prior to class obtain a dead plant.

I brought in some really neat items from home to show you all. The first item I want to share with you is a plant named Fred.

Go get dead plant, which has been hidden.

Fred was a great plant at one time, but now Fred is a dead plant. What should I do with Fred?

Solicit responses. Comment positively to each.



NOTES

I think I will definitely keep him because he is very important to the soil.

OBJECTIVE 1: Define composting.

I am very glad I decided to keep Fred, the dead plant. What could I ever do with a dead plant? Well, we are going to compost Fred.

*Define **composting**.*

Composting is the mixing of various decaying organic substances (like Fred) to make fertilizer that helps plants grow.

Pose the question:

What are other decaying organic substances that could be used in **composting**?

Answers might include: twigs, soil, food of any type, bones, etc.

OBJECTIVE 2: Demonstrate how to compost.

Great job! We knew quite a bit about what we could do with compost. Let's not just talk about it. Let's do it. **Composting** could also be thought of as making soil, so let's make some soil.

The first thing we are going to do is take a Soil Stroll. As we walk through the schoolyard and neighborhood, collect leaves, grass, weeds, twigs, dead insects, or anything else you think might be decaying. Are you ready to go? Let's stroll.

Take students to an outside location near the classroom. Also ask students save food scraps from lunch—banana peels, orange peels, lettuce leaves. Don't use dairy products or meat. Keep safety in mind! Advise students not to pick up dead animals or anything that might be a health concern. Have students wash their hands upon returning to class.

OK, we have collected soil-making items; now let's make it. Listen closely and perform each step only when I say GO.

- Lay the waterproof container on its side. Ready – GO.
- Cut a flap into it. Make sure you can reach in with a spoon. Ready – GO.
- Add some of the organic matter we collected from outside. Ready – GO.
- If you have food scraps, cut them into small pieces—the smaller, the better. Ready – GO.
- Spread the food mix in the milk carton and cover it with a layer of soil. Ready – GO.



NOTES

That's about all we can do today because composting takes time. We will have to remain patient as we stir the mixture inside the carton every day. We will add layer upon layer, and if the mixture is too dry, we will add a little water. When we have filled it with water, we will fill the milk carton to within an inch of the top and let the bacteria and mold do their work. In a while we will have "home-grown" brown soil or compost to add to the garden.

OBJECTIVE 3: Define recycling.

Composting demonstrated another very important concept. Why didn't we just throw old dead Fred away? Exactly, he was still useful. Most of the things people throw away are still useful. It is much more helpful to the earth, to agriculture, and to us if we recycle those useful items.

Define recycle.

To recycle is to convert a waste product into reusable material.

Composting is one great example of recycling. Can you think of others?

Solicit responses. Comment positively on each. Possible answers include soda cans, newspaper, furniture, etc.

Great! I hope all of you practice **recycling**.

SUMMARY/REVIEW

Use a Cartographer's e-Moment® to show the cycle of life that Fred (dead plant) has gone through.

REFLECTIVE REVIEW QUESTIONS:

- How is new soil made through the process of composting?
- How is recycling different from simply reusing a product?

We have started to make soil by composting and we also know how to recycle and why we should recycle. These are the types of things people who genuinely care for the earth and the land do to produce food for us. Try to encourage someone you know to compost or to recycle to help him or her become a good steward of the land. They will start to love the land as much as farmers and we do.