

# How Composting Works

Watch nature's magic show as every day food items can be transformed into nutrient-packed compost for your community's garden!

## Age Appropriateness:

5-8, 9-12

## Key Topics:

Environmental

Science

## Skills:

Critical Thinking

Planning

Design

## Materials:

Organic Materials,

Worksheet, Soil (or

photo of soil),

Materials for Compost

Bin (will vary).

## Action Time:

1-2 Hours

## Resources:

[http://  
www.howstuffworks.com/  
composting2.htm](http://www.howstuffworks.com/composting2.htm)

## OBJECTIVES

- Children will be able to name three benefits of composting.
- Children will analyze scenarios where composting may or may not be the solution.
- Children will begin a composting program.



## Discussion

Show students a handful of soil (or photo of soil) and ask children if they know where soil, or dirt, comes from. If they need prompting tell them, "We can make soil from a process called composting. Composting happens when we take food scraps and yard clippings, and allow microorganisms to come in and turn what was trash into soil." Ask children why they think it might be a good idea to turn trash into soil and allow a couple minutes for responses.

Then tell children they are going to read an article that will help us understand how we will be using compost, "We will be having our own compost bin near our new playground, so the next time you have an apple core or a banana peel you can compost it."

Read "Introduction to How Composting Works" in How Composting Works by Craig Freudenrich, Ph.D. (<http://www.howstuffworks.com/composting2.htm>). Complete the first two of the scenarios from the worksheet (next page) together then allow the children to complete scenario 3-5 on their own.

## Action

- Based on the suggestions in How Composting Works, decide on the site, structure, and ingredients that best suit your garden and community needs.
- Develop a plan with children to begin the composting program.

## Reflection

Perform a Trash Audit using the materials provided in Section 5 of How Composting Works. How much waste has been kept out of landfills because of your composting program? Children may also begin an observation journal to record the composting process.

Name \_\_\_\_\_

## Should We Compost It?

**Directions:** Read each scenario. Determine the best solution for each situation and explain your decision.

Marco had cereal with milk and a banana for breakfast. Left on his tray are half a bowl of cereal and a banana peel. What should Marco throw away? What should he compost? Give at least one reason for each answer.

Ana brought a sandwich to school for lunch. When its time for recess she has a few bites of sandwich left. What can she do with the lettuce and tomato? What should she do with the meat, cheese and bread?

Juan has been helping pull weeds and rake leaves from the flower beds as part of his 5<sup>th</sup> grade community service project. The weeds are dried out because they have been treated with pesticide, but the leaves have fallen straight from untreated trees. What should Juan do with the leaves? What should he do with the weeds?

The art teacher has been using newspaper for a sculpture project. Daisy sees that she has a small box of shredded newspaper left over. What could Daisy suggest the art teacher do? What should Daisy check the newspaper for?

Miguel sees his teacher drinking tea every morning and throwing away the teabag. What could Miguel suggest to this teacher? What could he suggest to other teachers who make coffee in the teachers lounge in the morning?