



## Theme: Plants (Grades 6-8)

### Post-Visit Activity #2 Eat Away!

#### Overview:

Students will create their own worm compost bin in the classroom.

#### Objectives:

- Students will learn about conservation, recycling and their environment.
- Students will understand their waste does not have to go in into our landfills.
- Students will observe the cycle of nature.
- Students will understand how they can help their environment.
- Students will observe how worms help break down scraps.

#### Materials:

- Five-gallon container with a lid
- Drill
- Dried leaves
- Potting soil
- Spray bottle
- Shredded newspaper
- List of what you can and cannot compost – to be taped to the box
- Worms (red worms, also known as red wigglers, are great for compost bins)

#### Pre-Activity for Teacher:

1. Purchase a storage bin with a lid on it.
2. Drill holes along the sides and bottom – not too big as you do not want anything to fall out. The holes make sure that the compost gets the air it needs.
3. Fill the bottom inch of the container with a small amount of potting soil, dried leaves and sand.
4. Mist the bottom layer with your spray bottle.
5. Purchase worms.

#### Activity:

1. With the students, brainstorm ideas in which they can help the environment.
2. Describe to them what composting is: *Composting is the process of turning food scraps into rich soil. Vermicomposting, or composting with worms, is one*

*way to convert food scraps into soil. Worms break down the food scraps and their tunnels in the compost pile help to mix it. Since food scraps have nutrients in them, those nutrients are in the soil once the composting process is finished. When finished compost is added to soil, it acts like a natural fertilizer for plants.*

3. Inform the class that they will be creating a compost pile where worms will break down food scraps.
4. Bring out the bin. You may choose to have students decorate it.
5. Share with the students the materials that can and cannot be composted.
6. Inform the students that the class will compost their scraps from lunch/home.
7. Divide the class into groups.
8. Have each group come up with a research question that they would like to find out more about using the compost bin. Some examples include:
  - How long does it take a certain material to break down?
  - Does material break down faster if it is put in the compost bin in smaller pieces or larger pieces?
9. Groups should come up with an experiment that would answer their research question. You may choose to have them perform their experiments in the compost bin, or just write them up.
10. Assign one group to monitor the bin and stir it once a week carefully. Groups should rotate monitoring the compost bin.
11. If the compost seems dry, mist it.
12. If it is too damp, add shredded newspaper.
13. Approximately two months later, there should be soil to use in the garden or for a planting experiment.
14. Please note the worms will only leave an environment that they are not happy in. If you notice worms trying to leave the bin, make sure the compost is not too wet or too dry.

**Discussion:**

1. What happens to your waste when you throw it in the garbage?
2. Why is it better to compost our waste instead of throwing it in the garbage?
3. How does composting affect the size of our ecological footprint?
4. How do the worms help our environment?

## Compost It!

### Please Do

Bread, rice, pasta, beans  
Fruits  
Vegetables  
Eggshells  
Coffee grounds  
Tea bags  
Plant leaves, grass clippings  
Newspaper

### Please Don't

Fat, oil, and grease  
Meat and bones  
Cheese  
Mayonnaise  
Milk  
Peanut butter  
Salad dressing  
Sour cream  
Eggs  
Pet waste