## Composting in the Classroom with Red Wiggler Worms

**Grade Level:** 5 – 8

### Objectives
Following this activity, students will be able to:
- Describe the process of composting
- Explain why composting is important to the environment
- Obtain the knowledge to set up a composting program at their home

### Materials
- Plastic Tub (approximately shoebox size)
- Newspaper scraps
- Organic waste material (food scraps)

### Procedures
1. Before assembling the compost bin students should have the following background information:
   - We create food waste everyday that is thrown away in the garbage and taken to landfills.
   - Composting decomposes food waste so we can return it to the environment.
   - Worms are decomposers. They eat organic material and break it down into a very fertile soil additive.
2. Ask students how many bags of trash their families put on the curb each week. Ask them where the bags go. Ask why is it important to help keep trash out of landfills.
3. Have the students rip the newspaper into strips, dampen them with water, and then place in the container. Next add a layer of table scraps and deposit the worms in the container. On top of that, another layer of damp newspaper. Place the lid (with holes pre-poked in the lid for air circulation) on the container and place in a dark place.

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1 Adapted from [http://www.resourceconservation.mb.ca/cap/vermi.html](http://www.resourceconservation.mb.ca/cap/vermi.html)
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Composting, the decomposition of organic material, such as kitchen scraps and yard waste is a natural process that turns waste into a nutrient rich soil amendment called humus. The use of worms in composting is called **vermicomposting**. The use of worms speeds up the decomposition process and provided a fun way for students to help the environment while learning to care for the worms.

The first thing you need to set up the class-composting project is a shallow plastic bin; such a Rubbermaid shoebox sized tub that is wider than it is deep. Be sure to poke holes in the lid of the plastic bin. The worms need air to survive. Gather newspaper scraps, not the glossy or colored paper. Also gather kitchen scraps such as eggshells, carrots, lettuce, cabbage, celery, apples, banana peels, and tealeaves and bags to place in the bin as the “worm food.” Locate a dark place in the room that is more or less away from the hustle and bustle of the day’s activities to store the project.

Be sure to make sure the children do not pack the bedding in too tight or drench the bedding. The worms will transform the waste to nutrient rich compost quickly. Keep a supply of “worm food” ready to add to the bin.

When ready to harvest some of the soil, place the bin in bright light. The worms do not prefer the light so they will make their way to the bottom of the container. After about ten minutes in the light, you can scrape off some of the soil and add new bedding and scraps. You should be ready to change out all the bedding in the bin every two months. The students will have great time fishing around for the worms!

Encourage students to make a composting bin at their home. Instead of sending fliers home, post pictures of the composting on Flickr. Add instructions, helpful hints, and photos for parents or even other teachers to create bins for themselves! You could even get some constructive feedback from blog comments for in the future.

**Where to buy Red Wiggler worms:**

Winnipeg, MB
**Red Wiggler Haven**  
Ask for Marilyn  
Phone: (204) 275-0253  
Email: mfirth@golden.net  
Web: www.redwiggler.110mb.com

Steinbach, MB
**Northern Sun Farm Co-op**  
Ask for Mike  
Phone: (204) 434-6887

**Vermicomposting Websites:**  
Wormworld, The Burrow, Cornell Univ., Worm composting basics, Wiggler Wrench

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