

PLANT IT!

Date _____ Plant seeds in 2 different types of soil and observe

Type of seed planted _____

Plain Soil

	# of times watered	# of sprouts to appear	average height of plants	condition of plants
Week #1				
Week #2				
Week #3				
Week #4				
Week #5				
Week #6				

Compost Enhanced Soil

	# of times watered	# of sprouts to appear	average height of plants	condition of plants
Week #1				
Week #2				
Week #3				
Week #4				
Week #5				
Week #6				

Date _____ Name _____



Worm Bins for Your Classroom

Information from: Under Ground Adventure Chicago Field Museum

http://www.fieldmuseum.org/undergroundadventure/teachers/worm_bins.shtml

Classroom worm bins provide an excellent opportunity for students to observe worms in action. It's easy to create a worm bin for the classroom. You can prepare the worm bin yourself, using the directions below, or involve students in the process of setting up the worm bin and feeding the worms.

To create your own classroom worm bin, you will need:

- Large plastic tub (5 gallons or larger) with lid or an old aquarium
- Shredded newspaper
- Tub of red wigglers from a local bait store
- 1 cup of soil from the schoolyard
- ½ cup of sand
- Vegetables or other organic items to serve as worm food

Note: Do not feed the worms meat or dairy products, as this can cause the growth of undesirable bacteria and attract rodents.

Plan it!

- Clean the container to remove any chemicals that might harm the worms.
- Soak the newspaper in water overnight so the chlorine will evaporate and will not harm the worms.

Do it!

- Fill half of the container with the shredded newspaper or worm bedding.
- Add a tablespoon of soil and a half-cup of sand to the bedding.
- Finally, add the worms and a little food.
- Make sure to bury all food at least 2 inches deep to deter fruit flies.
- Add food and spray with water regularly.

A worm bin can be made out of anything from an aquarium covered with black paper to a plastic tub with vent holes in the lid. The soil contains microscopic creatures and molds that will help the worms decompose the vegetables that you add to the worm bin. Adding the sand actually helps the worms digest their food. They store the sand in their gizzard, like a bird, and they use the sand to grind their food.

Worm Activities:

- Have students observe the worm bin and record what happens. What changes do they notice over time? How long does it take the worms to consume the food you give them? Are there certain foods they seem to prefer over others?
- Have the students place various items inside the worm bin, such as plastic caps, pieces of wood, or peanuts in the shell. Observe what happens to these objects over time. Is there anything the worms won't eat?
- Place one or two worms on a Petri dish on top of a moist paper towel. Cover half of the dish with black paper, leaving the other side of the dish exposed. What happens? Do the worms move toward one side of the dish? Do they seem to prefer the light side or the dark side? Does this mean worms can see?
- Make one side of the Petri dish cold and the other side warm. Which side does the worm prefer?
- Try placing different foods on opposite sides of the Petri dish. Which does the worm prefer?

Resources:

- **Worms Eat My Garbage: How to Set Up and Maintain a Worm Composting System**
Mary Appelhof
Kalamazoo, Mich.: Flower Press.
ISBN: 0942256107; 162 pp.
- **Worms Eat Our Garbage: Classroom Activities for a Better Environment**
Mary Appelhof, Mary Frances Fenton, and Barbara Loss Harris
Kalamazoo, Mich.: Flower Press.
ISBN: 0942256050; 214 pp.

Date _____ Name _____

