

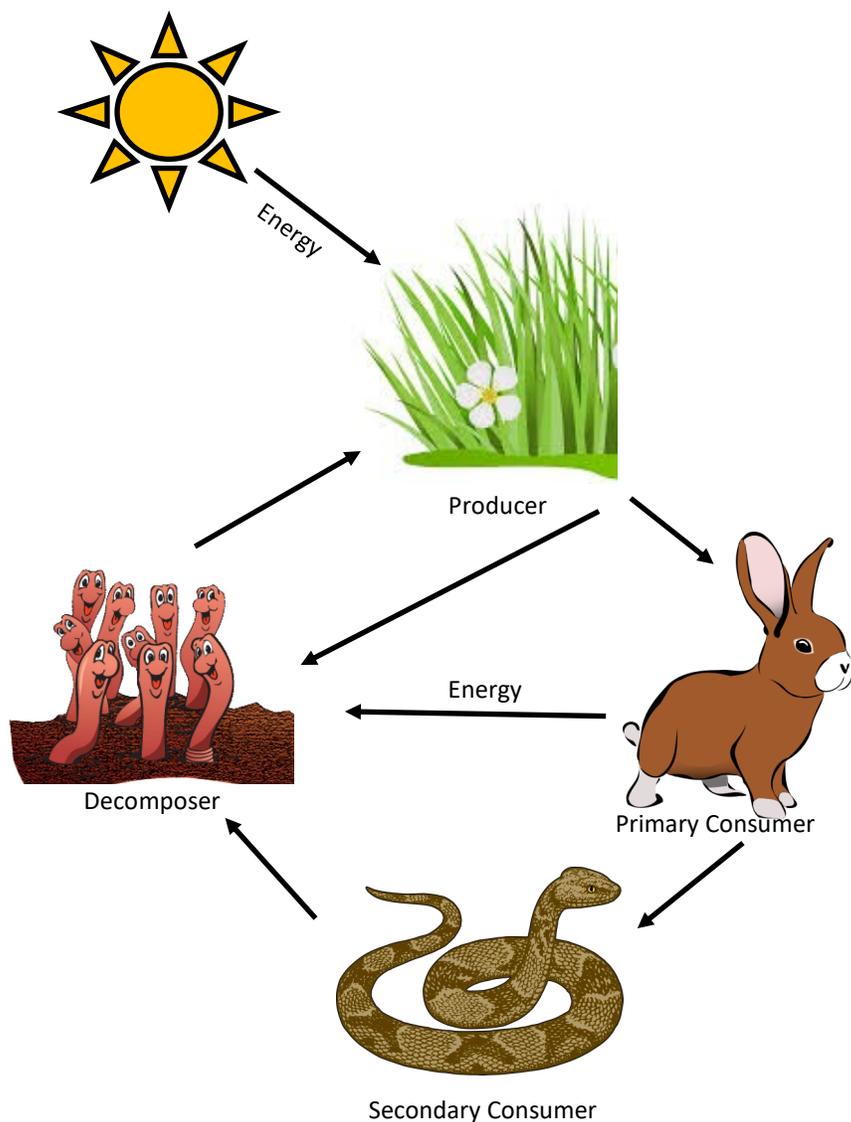
Materials Needed:

- Plastic Shoebox
- Water
- Shredded Paper or cardboard
- Plant-Based table scraps
- Red worms



Vermicompost

Vermi: latin for worm



Shelter:

- Red worms are shallow diggers— any shallow wood or plastic bin can be used.
- Put holes into the sides and top of your bin. This is to make sure your worms have air to breath!
- Keep your container closed and away from light. Red worms don't like light and will burrow away from it.

Food:

- Your worms need to settle in his new home for a couple days before they are fed.
- Cut table scraps into small pieces, bury them under the bedding, then place wet sheets of paper over it.
- Do NOT compost things like meat, diary, plastic, or foam products. Only Plant-based materials for an *indoor compost*.

Water:

- Worms' bodies are 75-99% water so they have to stay in a moist environment.
- Fill the worm bin 2/3 full with shredded paper, newspaper, or cardboard and mixed in soil. Make sure there are no glossy papers, colored ink, or tape.
- Add water until your bedding is moist, not soaked.
- Keep a spray bottle near the bin to spray it down if you notice the bin getting dry.

Why Compost?

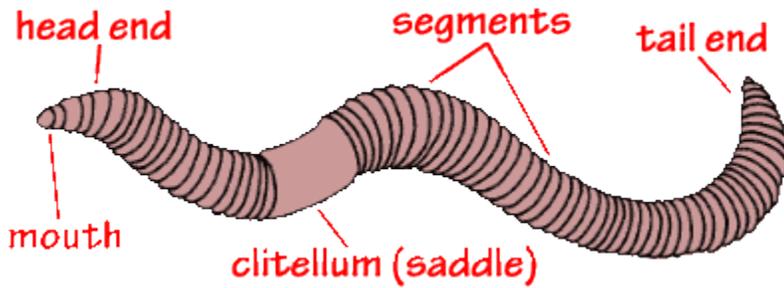
Every living thing requires energy. We all know energy cannot be created nor destroyed. Energy is continually changing forms and being transferred from one living thing to another. All of our food, requires food, water, and shelter itself. So every time we eat, we are consuming our food's food, our food's water, and other resources that may have went into producing that food. If we don't eat everything on our plate, we are not only wasting food, we are wast-ing all of the resources that went into producing that food.

When you compost, you take all of that wasted energy from your plate to feed decomposers. Decomposers re-cycle energy from waste in many different ecological systems. Like many decomposers, Red Worms eat the decaying materials and their digestive tracts break it into basic components. They excrete those nutrient building blocks combined with additional microbes from their digestive tract that goes back into the soil for plants!

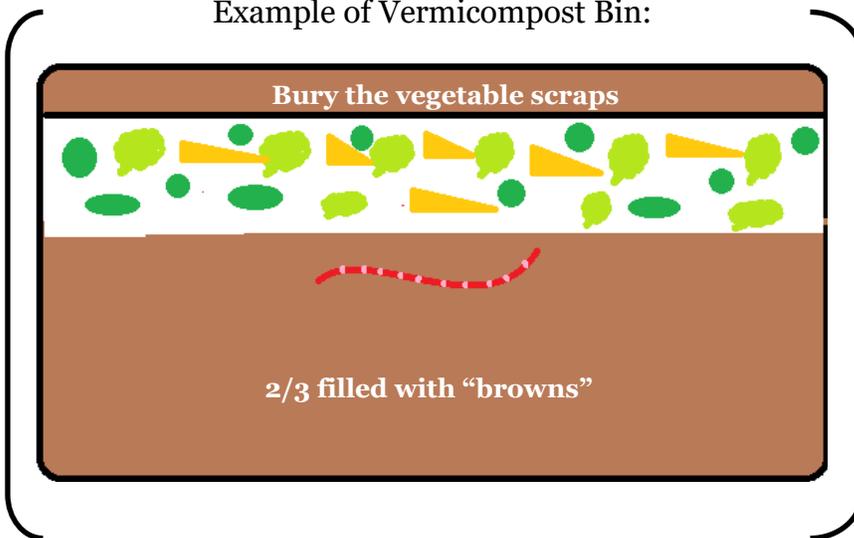


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Vermicompost



Example of Vermicompost Bin:



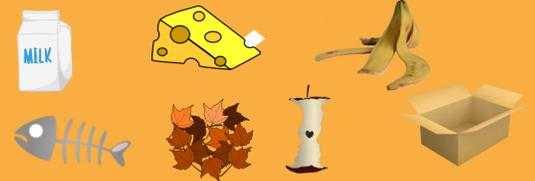
Maintaining your compost:

Worms will need a bedding of browns. Up to 1/3 of the shoebox should be filled with scraps. When feeding your worms, use a quadrant system. Mark the quadrant and date at each feeding to make sure you aren't overfeeding. For reference, 1 pound of adolescent worms can eat 1 pound of scraps in one day. At every feeding, make sure that the bedding is moist. If you ever add too much water, add more "browns". Other critters like earwigs, mites, and beetles may show up in your compost bin. However, only mites in *large* colonies can harm the worms.

Browns: carbon rich materials like; leaves, paper, cardboard, eggshells, tea bags, wood ashes, straw

Green: nitrogen-rich materials; like grass clippings, banana peels or other plant-based kitchen scraps

Circle the items that *should* go in your bin:



Summarizing Questions:

- What are the basic needs of all living things?
- What happens to the leftover energy in our food if it is thrown in the trash?
- How do worms contribute to an ecosystem?
- Why is composting good for Earth?
- Challenge yourself! Help to organize a contest between peers at school or siblings at home to see who can have the least amount of food waste in a week. Weigh all food wastes, collect data, and compare at the end of the week.