

Bring in the Cleanup Crew

Adapted from LifeLab



Objective: Will it rot or not?! Bury a variety of objects in the ground to investigate their decomposition rates.

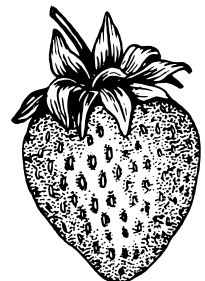
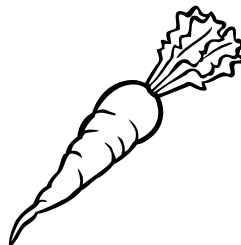
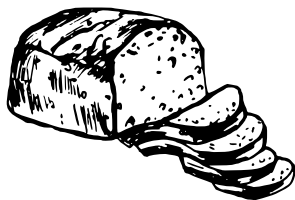
Background: What do you know about decay? Decay, or decomposition, is a process that happens when materials break down. Some materials take a long time to break down or don't break down at all. Some take a very short time. The rest are somewhere in the middle. Decomposition is very important in making nutrient-rich compost for our gardens. What do you think will decay sooner: a vegetable or a piece of metal?

Materials:

- Shovel
- Sticks or stones for markers
- Different materials: metal, glass, plastic, rubber, vegetables, bone, wood, paper, rope, leather, feathers, etc.

Activity:

1. Gather 5 to 8 small pieces of different materials that you will be allowed to bury in the ground. Think about whether or not they will decay as you pick them. Some examples could be a penny or screw, a small piece cut from a plastic bottle, a small plastic toy, a stick, vegetable scraps, a piece of fruit, paper, bone, or a piece of fabric. Also find enough small sticks or stones to mark where you will bury each item.

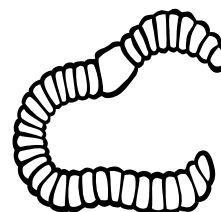
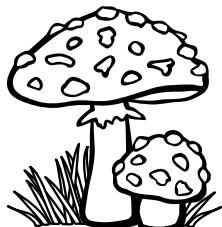


Do You Think It Will Decay?

2. Once you have picked 5 to 8 items, think about how fast they will decay. Put the items in order from what will change the most (or decay fastest) to what will change the least (decay slowest or not decay at all) when it is in the ground. Answer the questions below.

I predict the materials will decay from fastest to slowest in this order:

3. Using the shovel, bury each material in its own small hole. Try to make the holes the same depth. Mark each hole with a stick or stone.
4. Mark a date two weeks from when you buried your objects on a calendar. You will leave the objects in the ground for two weeks.
5. After two weeks, dig up your materials and investigate. How fast are the objects decaying? How are they changing? Answer the questions on the next page.
6. If you can't bury your objects, you can place your items on the ground and make the same observations.



Questions

1. How did the materials you buried change?
2. Which objects changed the most?
3. Which objects changed the least?
4. How did the results differ from your predictions at the beginning of the experiment?
5. Why do you think some objects decayed faster than others?
6. Which items do you think would be good to put in a compost pile?
7. What surprised you about this experiment?
8. If you did this experiment again, what would you do differently next time?