



OBSERVING THE DECOMPOSITION OF ORGANIC MATTER IN COMPOST



Focus Question: How does organic matter change as it decomposes in compost?



PURPOSE

To observe and record the physical changes in organic matter as it decomposes in a compost environment.



MATERIALS

- Clear container or jar with lid (1–2 liters size)
- Compost (from a bin or pile)
- Organic matter to observe (e.g., fruit peel, leaf, coffee grounds, small piece of cardboard)
- Spoon or trowel
- Spray bottle with water
- Labels or tape and marker
- Observation sheet (this page)
- (Optional) Thermometer



PROCEDURE

1. Label your container with the date.
2. Add a layer of compost to the bottom of the container (about 2–3 cm deep).
3. Place your organic matter on top of the compost.
4. Cover the organic matter with another layer of compost (2–3 cm deep).
5. Lightly mist with water so the compost is moist like a wrung-out sponge.
6. Put the lid on the container (not airtight). Store it in a warm spot out of direct sunlight.
7. Observe your compost every 2–3 days for 3–4 weeks.
8. Record your observations in the table.
9. Keep the compost moist. Add a little water if needed.



WHAT'S HAPPENING?

Microorganisms (bacteria and fungi) and small organisms break down the organic matter. They use it for food, releasing heat, water, and nutrients. Over time, the material changes into dark, crumbly compost.



PREDICTION

What changes do you think will happen to the organic matter over time?



OBSERVATIONS

Record your observations every 2–3 days.

Date	Look: Changes in appearance	Smell: Any changes?	Texture: How does it feel?	Other notes (temperature, organisms, etc.)



CONCLUSION

What happened to the organic matter? What does this tell you about decomposition?
