

Name _____

Composting: The Never-Ending Cycle of Matter



Have you ever thrown banana peels, apple cores, or leftover veggies into a compost bin? If so, you've been part of something amazing—the cycle of matter. Composting is more than just getting rid of food scraps. It's a powerful example of how matter is never lost, only changed and reused.

When we compost, we take food waste and natural materials like leaves and grass and let them break down. Tiny living things called decomposers, such as bacteria, fungi, and worms, help with this job. They slowly eat and digest the waste. Over time, the old food turns into rich, dark soil called compost. This soil is full of nutrients that help new plants grow.

Composting is part of the never-ending cycle of matter on Earth. The food scraps come from plants and animals that once grew from the soil. After composting, they return to the soil to help new life grow again. This shows that matter doesn't disappear—it simply changes form.

This idea is called the conservation of matter. It means that matter can't be created or destroyed in normal processes. When something breaks down, like food in a compost pile, the matter becomes something else—but it doesn't vanish.

The gases released during composting, like carbon dioxide, go into the air. Some water evaporates. The solid parts stay behind as compost. All of it goes somewhere—it becomes part of the air, the soil, or new life.

By composting, we're helping nature recycle matter. Instead of letting food rot in landfills, where it creates harmful gases, composting returns that matter to the Earth in a useful way. It helps plants, saves space in landfills, and shows us how the cycle of matter keeps going.

So the next time you toss your food scraps into the compost, remember: you're part of a natural system that has been working for millions of years. You're helping matter go on its next adventure.