

Mini-Landfill Experiment

(Age 8 and up.)

Each day, trash trucks around the world deliver garbage to local landfills. A landfill is a special area where trash is dumped and mixed with the earth. Some trash will break down and disappear over time, but other trash won't. Learn what kind of garbage is good or bad for landfills, and learn how you can make a difference!

What you'll need

A quart-size Ziploc bag
Loose soil
"Trash" pieces
A sunny window



What to do

1. Take a quart-size Ziploc bag and fill it about 1/3 full of loose soil.
2. Mix in 4 to 8 "trash" pieces. Use your imagination – here are just a few ideas:

rubber band	piece of Styrofoam
twist-tie	dead leaf
small rubber eraser	grass clippings
small cracker piece	piece of fruit peel
popped popcorn kernel	small nail, bolt or screw
string	piece of plastic bag
3. After you have filled your "landfill" with some "trash," dampen the soil with a small amount of water. A water mister or small squirt gun can work well for this. Just make sure the soil doesn't get muddy!
4. Place your mini-landfill in a sunny window.
5. Stir or knead the dirt every day.
6. Add a small amount of water every few days — just enough to keep the soil moist (but not muddy). If you keep the bag sealed, the dirt will stay wet longer.
7. After 2-3 weeks, empty the bag onto a large sheet of newspaper to see what has started to break down in your mini-landfill!

Investigate and discover!

Did you notice that any pieces started to decompose or fall apart? That means they are "biodegradable!" Things that are biodegradable will break down when they're mixed into the earth under the right conditions. Did some of the things stay just the way they were when you started? This means that they're not biodegradable. In fact, some types of plastic will NEVER break down in a landfill – they will be there forever!

Landfills are a problem all over the world because they are becoming full of trash that will never disappear. The most important thing to do to help save landfills is to RECYCLE! Here are some things that will never break down in a landfill, but that can be recycled to be used again:

- aluminum cans
- plastic milk containers
- rubber tires
- steel fruit/vegetable cans

Do your part! Remember, when the trash truck comes to your house, your trash is taken to the local landfill. Recycle all the materials that you can and try to make sure only biodegradable things go out in your trash!