

Lesson Printable 1 Everything's Connected



Name: \_

Date: \_\_\_\_

Eighty percent of your trash is hauled away to landfills<sup>1</sup>, but what happens to it there? Read Dr. Klein's journal to find out what he discovered at his local landfill.

# March 22, 2007

I'm an environmental scientist. I'm going to track three pieces of trash to see how long they take to *biodegrade* (break down)—a sheet of **paper**, an **orange peel**, and a **plastic bottle**.

# May 19, 2007

Landfills cover trash with dirt to keep animals and bugs away. Today I found that the paper has biodegraded by 45 percent, the orange peel by 30 percent, and the plastic bottle shows no sign of breaking down.

# July 23, 2007

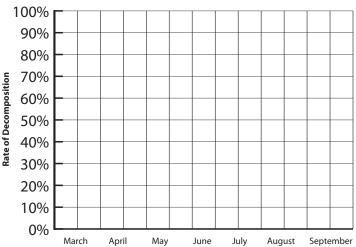
This landfill is lined with clay and plastic to prevent poisons from getting into our water supply. As of today, the paper has biodegraded by 90 percent, the orange peel by 60 percent, and the plastic bottle looks no different.

# September 25, 2007

The plastic bottle looks exactly the same! In fact, it may take 500 to 1,000 years for it to break down. The paper has biodegraded completely, and the orange peel has biodegraded by 90 percent. I've started to use a reusable water bottle so that less of my plastic trash ends up in the landfill.

# What did I read?

Help Dr. Klein track his observations. Place dots on the graph to show the progress of paper, then connect the dots. Repeat this for the orange peel and plastic bottle until you have three lines that show how quickly each item breaks down.



Why do you think that Dr. Klein began using a reusable water bottle? (Write your answer on the back of this page.)



and take the **FilterForGood**<sup>SM</sup> pledge to reduce your bottled water waste by switching to a reusable bottle!

About half of the garbage that Americans throw away could actually be recycled.<sup>2</sup>

Sources: 1. Ohio State University Fact Sheet: Landfill, http://ohioline.osu.edu/cd-fact/0111.html. 2. Recycling in Zion National Park, www.nps.gov/zion/naturescience/recycling-in-zionnational-park.htm.