

EXPERIMENT #1

The Bionic-Biogas Experiment

Scientists and engineers are always looking for new sources of natural gas deep in the ground—even under the ocean. What’s more, energy engineers are trying to use a type of natural gas called “biogas” that is being created in landfills (the places where they bury our garbage) across America. Biogas is the result of trash (food, wood, farm waste) that breaks down and releases gas.

Now, here’s a fun way to make some biogas of your own.

Directions:

1. Make a “yummy” mixture of the scraps and soil by putting both of them into the jar and stirring with the spoon.
2. Stretch the neck of the balloon over the mouth of the jar and fix it tightly with the rubber band. (Ask your teacher for help!)
3. Now, watch and wait. Put the jar someplace warm, like near a window in your classroom, for about a week. As the scraps break down with the soil, they will release gas. Then, your balloon will gradually fill with biogas.

Materials needed:

- Empty jar
- Balloon (don’t blow it up!)
- Rubber band
- Spoon
- Raw vegetable scraps (like carrots, apple or potato peels, broccoli stems, lettuce or greens)
- 1/4 cup of soil

This experiment was taken from <http://www.safegasohio.org/teachers/educators.html>

Check out their web site for more educational materials.