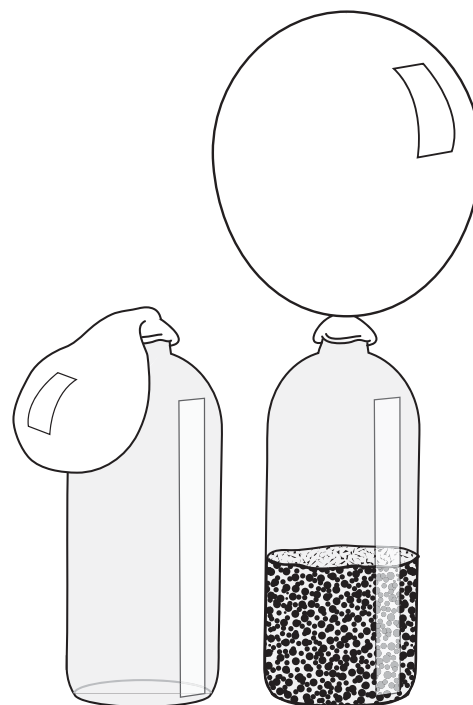


Organic Matter and Natural Gas

Materials

- Two plastic soda bottles (2 liter size) or ½ gallon plastic milk containers
- Sand
- Soil
- 2 extra large balloons (equal in size and color)
- Plant pieces (outside plants work best)



Objectives

Students will recognize that natural gas is a product of decomposing organic material. Students will identify natural gas as a nonrenewable energy resource.

Procedure

Review the term, *organic*: matter derived from plants and/or animals.

Cover the top of one empty bottle with a balloon. This container will be the “control” of the experiment.

Fill second bottle 1/3 with plant pieces (torn into pieces). Drop sand and soil on top of plant pieces to create a thin layer. Cover top with balloon. Set in a warm sunny location for 1 week or more. Have students observe and compare any gas collection in balloons. Discuss observations and ideas.

Relate activity to how natural gas is formed: organic matter decomposes and is buried deep in mud or sand. Intense heat and pressure over much time causes gas (primarily methane) to form.

Discussion Questions

1. Why does the bottle with organic matter fill up the balloon?

- *As the organic material decomposes gas is released into the balloon*

2. How does this relate to natural gas found underground?

- *As plants and animals decompose underground natural gas is released into the ground.*