

Natural Water Filtration Lab Procedure

Purpose

In this activity, you will build a model of Earth's natural water filtration system using gravel, sand, and charcoal.

Materials

- 1 plastic bottle (cut in half)
 - Coffee filter or cotton ball
 - Gravel
 - Sand
 - Activated charcoal
 - Dirty water
 - Cup or beaker
-

Procedure

Step 1

Place the coffee filter (or cotton) inside the neck of the bottle.

Step 2

Turn the top half of the bottle upside down and place it into the bottom half.

Step 3

Add the filter materials in this order (*Gravel should be on the top*):

1. Charcoal
2. Sand
3. Gravel

Step 4

Observe your filter before testing.

Step 5

Slowly pour one cup of dirty water into the filter.

Step 6

Allow the water to pass through completely.

Step 7

Observe the filtered water.

Record:

- Color
- Clarity
- Odor
- Visible particles
- Time required to filter

Step 8

Compare your results with another group.

Important Safety Reminder

Do NOT drink the filtered water.

This activity models Earth's natural filtration process, but the water is **not safe for drinking**.
