

Create a Water Filter

Materials

- Two 2-liter bottles cut in half
- Napkins or paper towels
- Gravel, sand, and cotton balls (for the filter)
- Dirty water (pieces of newspaper, food coloring, cooking oil, Styrofoam, etc.)

Instructions

1. Put the top half of the soda bottle upside-down (like a funnel) inside the bottom half. The top half will be where you build your filter; the bottom half will hold the filtered water.
2. Layer the filter materials inside the top half of the bottle. Think about what each material might remove from the dirty water and in what order you should layer the materials. For an added challenge, use only two of materials to build your filter.
3. Pour the dirty water through the filter. What does the filtered water look like?
4. Take the filter apart and look at the different layers. Can you tell what each material removed from the water?
5. Wipe the bottle clean and try again. Try putting materials in different layers or using different amounts of materials.



Before and After Filtration

Resources:

<http://pbskids.org/zoom/activities/sci/waterfilter.html>