

CAPTURING THE RAIN ACTIVITY SEVEN

Once alum has been used to clear dirt from water, workers at the water treatment station let the water trickle through sand filters which trap any remaining dirt and leave the water clear and colourless.

Make this model of a water filter and test it with dirty water.

Make a Water Filter

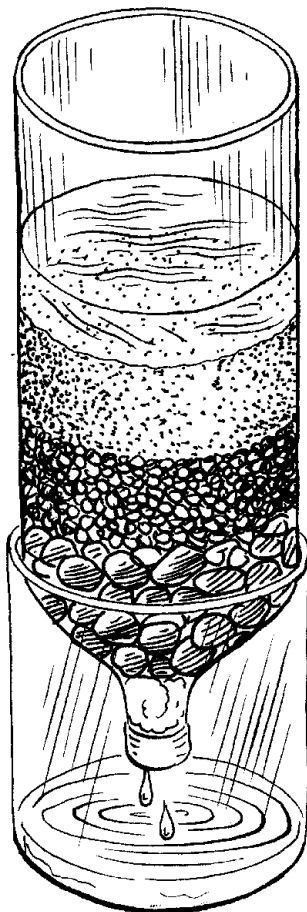
Have a go at making your own filtration unit.

You will need:

- A plastic bottle
- Scissors
- Water
- Sand (clean)
- Small pebbles (clean)
- Cotton wool
- A glass
- A jug
- A teaspoon
- Soil

Steps

- Cut the bottom off the bottle using scissors.
- Lay cotton wool in the neck, then turn the bottle upside down into the glass.
- Fill the bottle with layers of pebbles, gravel and sand.



Now test your filter:

- Fill your jug with water, add 2-3 teaspoons of soil and stir it well.
- Pour this mixture slowly into your filter and watch to see the colour of the water that drips into the glass.

Do not drink this water as it may contain harmful germs.

This next activity is a good one to do in small groups. You will design and make a simple water filter to remove dirt from water in the shortest possible time. Why not make this into a technology competition and see whose design does the best job?:-

1. Decide on what will be a fair test to choose the best water filter.
2. Experiment with different designs of sand filter to find one which cleans the water best, without taking too much time. Use the same materials as before
3. Do the test and prepare a report on your findings.

Germ Danger! Do not drink the water!