

Water filter

Quick guide

Age range

7+

30 mins



Outside / indoor



Covers topics on:

Science
Experiment

Group activity



Make a filter and examine how it can be used to clean water.

You will need

- Bucket
- Sieve
- Glass jars
- Funnels (cut the top off a large plastic bottle)
- Sand
- Gravel
- Cotton wool
- Blotting paper
- Mud, leaves, salt, food colouring etc. to act as pollutants

What to do

1. Stand the funnel in a jar and plug the neck of the funnel with cotton wool.
2. Add a layer of gravel and sand, then blotting paper trimmed to fit the top.
3. Take a bucket of water and add to it different pollutants: mud, gravel, sand etc.
4. Pour the water through the sieve and see which pollutants have been removed by this method.
5. Next pour the dirty water through the filter and see how clean water filters through.
6. What pollutants are still in the water? Colouring? Explain that water is also treated with chemicals to make it safe to drink.

Fun fact

The water we use today is the same water that was on the planet when dinosaurs were around

Leaders' notes

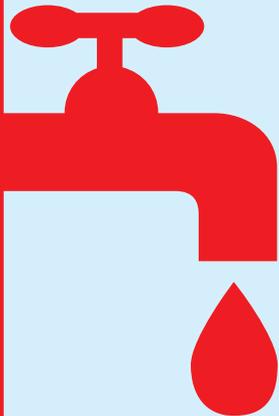
This exercise shows how different methods can be used to remove substances from water. Some of these processes happen naturally, such as filtering through chalk and rock, and others are processes which have to be performed to make water safe to drink.

Southern Water takes water from several different sources, including underground aquifers, rivers and surface water reservoirs. Over two-thirds of it comes from underground sources or aquifers.

The level of treatment the water undergoes before being pumped into supply depends on where it comes from.

Generally, water from aquifers is already of a high quality because it has been filtered through many layers of chalk or sand and needs only disinfection with chlorine.

Water from rivers and reservoirs contains a range of substances which need to be removed through several processes.



30%

rivers and reservoirs

