

Thirsty work



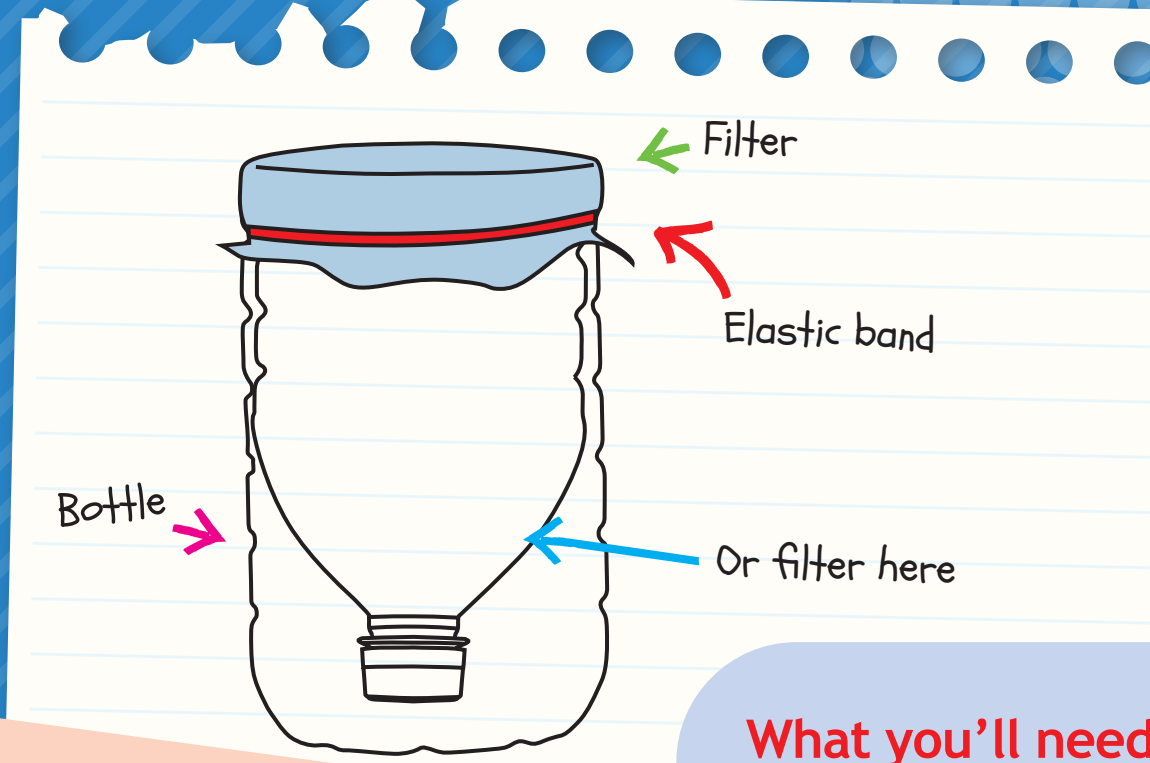
Survival skills



20 mins



Jump straight in



Aim of activity

Finding clean water in the wild can be tricky. Let's experiment to find out the best way to filter water to make it clean to drink.

What you'll get out of it

- Explore which materials work the best to filter water.
- Solve problems creatively.
- Work as a team.

What you'll need

- An outside space

For each group:

- At least 1 plastic bottle (any size)
- A pair of scissors
- Some dirty water (water mixed with soil)
- Elastic bands

Some materials you can experiment with as filters, such as:

- Old clean tights
- Torn-up old T-shirt
- Sponge
- Old clean socks
- Gravel
- Kitchen towel
- Charcoal powder



WE DISCOVER, WE GROW

Girlguiding



Before you start

Place all the different filter items out on a table in the middle of the space.

Water is vital for survival, but it can be hard to find in the wild – and when you do, it's often dirty. But some everyday items can be surprisingly good for making it cleaner...

What to do

1 Get into your Patrols and take an empty plastic bottle, a bottle of dirty water and scissors.

2 Your challenge is to make your dirty water as clean as possible using your plastic bottle and the filter items on the table. You can filter your water as many times as you want and use as many different materials as you like. You have ten minutes.

3 Cut the empty bottle in half across the middle – see the picture on the front of this card.

4 To make a filter, take the lid off the top half of the bottle and turn it upside down. Take the top half of the bottle and attach whatever you want to use as a filter to the large open end with an elastic band. Be careful – the edges you have cut will be sharp. See the picture on the front of this card.

If you want to try using a loose filter like gravel, line the bottle with some kitchen roll to stop it falling through.

5 Now, place your filter bottle over the leftover bottle base and slowly pour the dirty water through. You may have to wait a while for the water to get through some of the filters.

6 Try it again with different filter materials.

7 Take your clean water and compare it with the other Patrols in your unit. The team with the cleanest water wins. What was the best filter overall and why do you think this was? What other materials could you use?

Would you drink the water you have just filtered? Even when you've filtered your water in the wild, the only way of making sure it's really safe to drink is to build a fire and boil it for a while.