Soap and Pepper Experiment

Equipment

This experiment shows how soap breaks down germs. You will need:

A bowl of water, liquid soap, ground pepper.

Instructions

1. Sprinkle some pepper into the bowl of water. The pepper represents germs!
2. Dip your finger into the germy water. Notice how the germs stick to your finger?
3. Now put some soap on the end of your finger and dip it into the germy water again.
4. Watch the germs move away from the soap!

The importance of handwashing

Whether it’s after going to the toilet, before eating or when you’re preparing food, washing your hands with soap and water is one of the easiest ways to prevent the spread of germs!

But how does soap really work?

When you wash your hands, the soap breaks down the outer layer of germs which means they can’t survive. The pieces of broken down germs are then surrounded in a soapy bubble-like shield. After washing your hands for at least 20 seconds, you then rinse the soap away with water. When the soap is washed down the drain, you wash the germs away with it! Clever right?
Handwashing across the world

Here in the UK, washing our hands with soap and water is part of everyday life. However, this isn't the case for everyone around the world.

Did you know...

- 2.3 billion people in the world – almost one in three – lack soap and water for handwashing at home.
- 43% of schools globally do not have soap and water for handwashing.

Without a good place for handwashing, disease will spread more easily, and people will become unwell. This means that children won't be able to go to school and adults won't be able to work.

Time for discussion

Use the questions below to discuss handwashing:

- When should we wash our hands? How long for?
- Why is using soap so important?
- What would happen if we didn't use soap?
- Why doesn't everyone have access to soap and water?
- How would you feel if you didn't have access to clean water and soap for handwashing?
- How can we ensure that everyone in the world can wash their hands?