

Week commencing Monday 6th July 2020

LO: To learn why soap works

What is the purpose of using soap? Why do we use it?



In this experiment, you are going to find out why soap works and why it is better than using just water to wash your hands.

When carrying out this experiment, remember the surface of the water in the bowl represents your hands. The pepper represents harmful dirt and germs that need to be washed away.

Task: You have to carry out **two tests** in this experiment

- 1) Where you will wash your hands without soap
- 2) Where you will wash your hands with soap.

Before you carry out any of the tests, complete the record sheet predictions below. Then move onto completing the rest of the record sheet as well as answering the questions.

The method

1. Fill the bowl with water, but not all the way to the top.
2. Sprinkle some black pepper on the surface of the water. You should see the black pepper floating.
3. **Test 1:** Dip your finger in to the centre of the bowl of water. Watch what happens to the pepper and record this.
4. Dry your hand, then dip your finger into the liquid hand soap.
5. **Test 2:** Dip your soapy finger into the centre of the bowl of water. Watch what happens to the pepper and record this.

TOP TIP: Use a camera to take photos to record what happens to the pepper each time you put your finger into the bowl.

You will need:

- A bowl
- Some water
- A sprinkle of black pepper (or another spice)
- Liquid hand soap
- A hand towel

Record sheet:

Test 1:

What I predict will happen when I put my finger into the bowl the first time.	What actually happened.	Evidence: You may wish to draw or add a photograph.

Test 2:

What I predict will happen when I put my finger into the bowl the first time.	What actually happened.	Evidence: You may wish to draw or add a photograph.

Why was there a difference in how the pepper behaved when the soap was added?

Think of the surface of the water as the skin on your hands and the pepper as microbes on your hand. Write a sentence to explain what happens when soap meets the microbes on your skin.

Why should we use soap when we wash our hands?
