



'SOAP' AND PEPPER

This activity takes 5 mins

Intro:

This activity introduces small children to the idea that soap gets rid of germs and viruses and that it is important to wash your hands.

The science:

Soap doesn't kill germs, it sees them off!

Germs stick to the oils and grease on our hands. Water alone doesn't remove germs because water and oil don't mix. But soap molecules are surfactants, which means they have one water loving end (hydrophilic) and one oil loving end (hydrophobic).

When you wash your hands with soap, the soap molecules act as a mediator between the water and oil molecules and bind with both of them at the same time. Then when you rinse everything off, the soap carries away the germs with the water.

What you will need:

Two plates
Black pepper (in grinder)
Hand soap
Water

Instructions:

Pour some water onto one plate
Grind pepper (germs/virus) on top of the water
Dip finger in... no response and pepper on finger
Put some hand soap on the other plate
Dip finger in hand soap
Dip soapy finger in the peppered surface of the water and watch the pepper rush away to the edges!