

**Key Stage 1**

Spread of Infection: Hand Hygiene

# Lesson 2: Hand Hygiene

By taking part in a classroom experiment, pupils will understand how soap or sanitisers work and that hand washing is the best way to remove microbes.

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## Learning Intention

* Explore and understand how soap and sanitisers help remove microbes, and develop an appreciation for the importance of proper hand washing as the most effective method for maintaining hygiene and preventing the spread of germs.

## Northern Ireland Curriculum Links

### Curriculum Key Elements

* Personal Health and Moral Character

### Curriculum Skills

* Communication
* Managing Information
* Thinking
* Problem Solving and Decision Making
* Working with others

### Curriculum Areas of Learning

* Personal Development (PDMU)
* The World Around Us (TWAU)

# Lesson 2: Hand Hygiene

## Resources Required

### Activity: Pepper and Water Experiment

#### Per group

* Small plastic bowls
* Water
* Washing up liquid
* Pepper
* Cocktail sticks

### Extension Activity: Healthy Hands Fact Sheet

#### Per pupil

* SH1 Healthy Hands Fact Sheet

### Extension Activity: Hand Washing Flashcards

#### Per class

* SW1 Hand Washing Flashcards

### Extension Activity: Fill in the Blank Worksheet

#### Per pupil

* SW2 Healthy Hands Fill in the Blank Worksheet

Supporting Materials

* SH1 Healthy Hands Fact Sheet
* SW1 Hand Washing Flashcards
* SW2 Healthy Hands Fill in the Blank Worksheet

## Advanced Preparation

Set up a few bowls of water with pepper sprinkled on the surface, a few plain bowls of water, and another bowl with washing up liquid in.

# Lesson 2: Hand Hygiene

## Key Words

Hygiene

Soap

Hand washing

MicrobesHealth & Safety

Ensure that the demonstrating students have no soap allergies or sensitive skin conditions

For safe microbiological practices in the classroom consult CLEAPPS

[www.cleapps.org.uk](http://www.cleapps.org.uk)

## **Weblinks**

e-bug.eu/eng/KS1/lesson/ Hand-Hygiene

## Introduction

1. Begin the lesson by asking the pupils if they know why we wash our hands. Explain that we wash our hands to not only remove any dirt and grime that we can see, but also to remove germs (microbes) that we cannot see.
2. Explain to pupils that because we use our hands all the time, they pick up millions of germs (microbes) every day. Although many of these are harmless some could be harmful and might make us ill.
3. Explain that our skin is naturally covered in oils and that this oil helps microbes ‘stick’ to our skin. This means we need to wash our hands properly with both soap and water to be able to wash away the germs from our hands. If no soap is available, hand sanitiser gels can also remove germs from our hands.
4. Explain to the pupils that they are now going to complete an activity to show them why soap is important when we wash our hands

## Activity

This activity shows how washing with soap and water is better than using water alone. Demonstrators should help pupils with cocktail sticks to ensure safety. The bowls must be rinsed after each group for this activity to be effective.

1. Explain to the class that the surface of the water in the bowls represents their hands, and that the pepper represents harmful microbes that need to be washed away.
2. Dip the end of a cocktail stick into the plain bowl of water and then into the pepper water. Gently swirl the cocktail stick around and explain that using water to wash your hands only moves the microbes around.
3. Dip the cocktail stick into the bowl of washing up liquid and then into the pepper water.
4. The pepper (microbes) will move towards the edges of the bowl as the soap hits the surface of the water.
5. Explain to the class that the soap breaks up the oil on our hands. The microbes can then be washed away when we rinse the soap off hands with water.

Now visit e-bug.eu/eng/ks1/ lesson/Hand-Hygiene to find a NHS demonstration and UKHSA hand washing song to help make the correct technique more memorable for little hands.

## Discussion

Can the pupils answer the question: Why do we use soap to wash our hands?

Discuss where germs (microbes) on their hands may have come from. Emphasise to pupils here that not all the germs on their hands are harmful; there may also be useful microbes there too.

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Emphasise to pupils that we also need to wash hands properly. Highlight that microbes like to hide in between fingers and under the nails. It is important to know both WHEN and HOW to wash hands properly to prevent harmful microbes and potentially infection.

## Extension Activities

### Healthy Hands Fact Sheet

Provide each pupil with a copy of SH1 to consolidate the session. pupils can learn and share Healthy Hands facts with family and friends.

### Hand Washing Flashcards

SW1 can be used to support learning. Print the sheet and cut out the flashcards, or display on a whiteboard. Ask children to explain the image, the correct words are shown on the card.

### Fill in the Blank Worksheet

Provide each pupil with SW2. Ask pupils to name the image to complete the sentence. Pupils can re-write the completed sentence or read it out loud.

## Learning Consolidation

At the end of the lesson, ask the class to pair up and discuss their responses for the following sentences:

1. A song to use when washing my hands is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. I will wash my hands at key moments during the day, for example: \_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. There are how many steps to wash every part of my hands?
4. If I am not able to wash my hands with soap and water, I will use \_\_\_\_\_\_\_\_\_\_\_

Then ask the class to complete the sentences with their own answers individually.

• Most microbes on our hands are under our fingernails.

• Nearly everyone says they wash their hands after using the toilet, but more than half don’t. Just think what may be on their hands.

• Most toilet handles have 400 times more microbes than the toilet seat.

• There are more microbes on one person’s hand than people on the planet.

• Hand washing is the best way to stop microbes spreading.

• Some microbes can stay alive on our hands for up to three hours

What makes our hands dirty?

We get microbes on our hands from everything that we touch like door handles, school desks, the floor, or our pets. We also get microbes on our hands when we hold hands, pick our nose or sneeze into our hands.

Why should we wash our hands?

We wash our hands to get rid of harmful microbes that might make us poorly. It is important that we wash our hands after using the toilet, before eating or cooking, after stroking animals or after coughing or sneezing.

Surprise your friends and family with these fun facts.

## Healthy Hands

### Fact Sheet



## SH1 - Healthy Hands Fact Sheet

## SW1 - Hand Washing Flashcards



**Back**

**of fingers**

Back

of fingers

**Scrub**

**your hands**



Scrub

your hands

**Backs**

**of hands**



Backs

of hands



Thumbs



Tips of fingers



Between fingers



Soap



20 seconds

## SW2 - Healthy Hands Fill in the Blank Worksheet



Turn the

to run the



Put

on your



together

Rub your



Rinse your

with



Turn off the



Your hands



Throw the paper towel in the