### Age group

4-5 years old 4-6 year old

### **Curriculum focus**

Science, English (Literacy)

### Learning objectives

#### Pupils will:

- explain some uses for gloves and why they are important
- describe the properties of gloves using adjectives
- sort gloves by material or property
- optionally, think of and carry out a fair test for one property of a glove
- understand and be able to demonstrate how to keep themselves and others safe, and to reduce the potential for harm when possible
- through creative play, explore different materials and share their reasoning for selecting materials for different purposes.



### **Time needed**

#### 55 – 75 mins

#### About this activity

- This activity uses describing, sorting and sensory activities to explore how to choose the right gloves to protect our hands as we do different jobs at home, school and work.
- Pupils first share ideas for how our hands are important and help us do lots of things, before discussing how gloves can protect our hands in different situations.
- They touch and try on gloves to sort them and think of describing words for each one.
- Using their describing words and linking these properties to the gloves' functions, they identify the best gloves for different tasks, either through a story or in a series of stimulus images.
- They then carry out some classroom tasks while wearing different gloves, and choose the best ones to wear for each activity.
- Optionally, pupils can think of and carry out a simple fair test to sort gloves in relation to one property.



### What you will need

- Presentation slideshow
- Crayons, colored pens and drawing paper
- Data projector or interactive whiteboard
- A wide selection of gloves, enough for one glove per pupil. Suggestions:
  - Washing up gloves
  - Fleece
  - Wool
  - Neoprene
  - Nitrile (rubber)
  - Oven gloves
  - Goalkeepers' gloves
  - Leather fashion gloves
  - Waterproof
  - Mittens
  - Cycling gloves
  - Gardening cotton
  - Gardening leather or suede
  - Rigger
  - Electrical safety
  - Chemical safety
  - High-grip
  - Fingerless
  - Other work-related gloves

### Timings and structure

#### Total time: 55 - 75 mins

Activity	Time
Introduction and Q&A	5
Activity 1: Hands and gloves discussion	10
Activity 2: Describing gloves	10
Activity 3: Choosing a glove – pictures or story	10
Activity 4: Try it with gloves on	10
Activity 5: Sorting gloves	5
Activity 6: Conducting a fair test – optional extension*	20
Round up	5

\*optional activities



# Prior knowledge and preparation

- At this age, children are learning how to sort objects into groups based on simple properties - whether they have this property or not (e.g. warm, made of wool) or putting in order (e.g. warmest to least warm).
- It's helpful if students are familiar with the idea of describing words and can bring in a pair of their own gloves.
- To deliver activity 4, pupils will need access to some classroom activities and toys: building bricks and construction sets, jigsaws, paper and pencils, threading beads etc., to try while wearing different gloves.
- You can build on the optional activity 6 by using students' ideas to complete a practical investigation into one property of gloves. You may need other equipment for this, including rulers or tape measures, a plastic tank or tray filled with water, and a stopwatch.



### **Deliver the activities**

#### Introduction (5 mins)

### Introduce yourself and the topic of how gloves are our handy helpers.

- **1.** Explain who you are and that you work for a large company called BP.
- Using slides 2 and 3 from the presentation, explain that at home and in BP, people often need to use gloves to help them do jobs. Today, you've brought some gloves in so that the class can find out about different types and how we can choose the right glove to help us do different jobs.

# Activity 1: Hands and gloves discussion (10 mins)

#### Discuss why hands are important and when we might want to protect them by putting on the right gloves.

- **1.** Students name some things that we use our hands for, at home or at school.
- Pupils recall what they have done since they got up, and how they used their hands for getting dressed, brushing their teeth, putting on clothes, writing etc.
- **3.** Name some jobs (e.g. teacher, fireman, nurse, carpenter, gardener). How do they use their hands? Mention your own job, and ask what their parents do.
- **4.** If you wish, discuss what it might be like if we couldn't use our hands.
- **5.** Explain that it's important to take care of our hands and protect them. What kinds of gloves can we use?

#### Activity 2: Describing gloves (10 mins)

#### Use a range of gloves to help pupils think of describing words for some of their material properties.

- Hand out your own and students' gloves so each child has one. Pupils try them on, look at them and feel them and share ideas for what they look and feel like.
- 2. Using slide 4, gather some describing words for the gloves (shiny, smooth, thick, thin, colored, rough, smooth, warm, waterproof etc.) and, if you can, write these on the board.
- Introduce the idea that describing words tell us important things about each sort of glove – their 'properties'. Use describing words to choose the right glove for different jobs (e.g. warm, waterproof, tough).
- **4.** Get each pupil to draw around their glove on a sheet of paper and write down some words to describe it.

### Activity 3: Choosing a glove – pictures or story (10 mins)

# The class identifies some appropriate gloves for jobs, using either a series of pictures or a story to stimulate them.

- Explain that the class now needs to help you choose the right gloves to protect a person's hands in some different jobs.
  Emphasise that if we wear the wrong sort of glove, we might hurt ourselves or have an accident that could hurt other people.
- Make sure the gloves are arranged so pupils can see the different sorts. To make this simpler, just include gloves that are relevant. To make it more difficult, include gloves that would not be needed.
- **3.** Either show slide 5 and read the short story (see separate PDF) or work through the pictures from slide 6 (as many as you wish).
- Pause after each picture or story activity and use the gloves and pupils' ideas to identify some suitable gloves (there may be more than one right answer).



#### Activity 4: Try it with gloves on (10 mins)

# Pupils try different gloves on as they use a range of classroom activities.

- Ask the class if we could just get away with a single sort of 'super glove' that is good for every sort of activity. What describing words could we use to work out what this 'super glove' would be like (its properties).
- 2. Split the class into groups (as many groups as there are activities) and get each pupil to put on a pair of gloves. Try to make sure that some are wearing gloves that allow fine manipulation, while others can't do this.
- **3.** Help groups to circulate between activities, trying each one for a minute.
- **4.** Gather the class together again and talk about what it felt like to do different things with different gloves (again you can link this to describing words like hard, easy, frustrating, fun, fiddly etc.).

#### Activity 5: Sorting gloves (5 mins)

### Pupils sort gloves according to their different properties.

- **1.** Ask for ideas on how the class could sort the gloves into groups, using some of their describing words.
- Pupils sort the gloves using one or two ideas. Help pupils see that one type of glove could be sorted into more than one type of group (e.g. thick/thin, dark/light, warm).

### Activity 6: Conducting a fair test – optional extension (20 mins)

### Pupils carry out a fair test investigating a property of gloves.

- Choose one property of gloves (e.g. stretchy or waterproof). Discuss what test the class could conduct on these gloves to put them in order according to that property (e.g. most to least stretchy or waterproof) or, to simplify, students could investigate whether or not they have that property. Develop the experimental question (e.g. Which is the most stretchy?). You could use the final slide as a guide.
- 2. As appropriate, discuss the idea of conducting a fair test ( i.e. changing one thing and keeping everything else the same. For example, if testing for waterproofing, children could see how long the glove can be held in water before leaking, but all gloves should be held in the same way and same depth).
- **3.** Discuss how observations could be recorded for the experiment.
- **4.** With teacher assistance, students work in pairs or small groups to carry out their fair test. Record and discuss students' results.

#### Round up (5 mins)

- **1.** Thank pupils for listening and taking part.
- 2. Ask general questions to review what pupils have learned about what we do with our hands, how we can protect them with gloves, and how we can use the properties of gloves to choose the right pair for different jobs.
- **3.** Mention again why it is important to protect our hands.
- **4.** Conclude by saying that you hope they have enjoyed learning about gloves.

