

Design a Face Mask

*This lesson was written in January 2021
and reflects information available,
and guidance issued at the time.*



Objectives:

- To identify wearing face masks/coverings as a prevention measure of spreading the virus
- To explain using key vocabulary how transmission can be reduced when wearing a face mask/covering
- To test materials and choose those suitable for a face mask/covering, giving reasons to support their choice

Curriculum Links:

- **Science:** Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- **Y5- Science:** give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials
- **Y6- Science:** planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Key Vocabulary:

- face covering
- face mask
- suitable material
- breathable
- flexible
- saliva droplets
- virus spread

Resources:

- PowerPoint
- Teddy (optional)
- Selection of materials (suggested list):
- Fabric in various patterns/thicknesses
 - hessian,
 - plastic,
 - paper/baking paper
- Baster tool/pipette
- Elastic bands
- Teddy face worksheet
- Scissors
- Glue
- Worksheet for recording

FAQs:

Why do some people not like wearing a face mask/covering? They are not very comfortable. Those wearing glasses find they steam up.

Year 5-6

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FAQs cont:

Why don't younger children (under 11 years old) have to wear a mask? UK government (gov.uk) says:

- children under the age of 11 do not have to wear a covering, no specific rationale given, they do say Public Health England does not recommend face coverings for children under the age of 3 for health and safety reasons

Does wearing a mask stop you from getting the virus? It mainly stops transmission to others.

Why are some people wearing shields instead? Are they just as effective? Face shields are not as effective as face coverings as they don't cover the mouth and nose and therefore do not adequately reduce viral spread from the wearer. They can be used in addition to a face covering.

Introduction:

5 mins



Watch COVID-19 Warriors video introduction.

Test suitable materials to design a face mask/covering (can use teddy, to make a face mask/covering for teddy)

Questions: **What is the correct way of wearing a face mask/covering? Why?** (covering mouth and nose, so the air droplets that come out of our mouth as we speak and out of our nose as we breathe, don't spread too far)

What kind of material is suitable for a face mask/covering? Look at the selection of materials and discuss which might be suitable.

Can the children suggest a way to test it?

Show them other equipment available - glitter/flour, tube, elastic band and pipette/gravy baster to blow air.

Demonstrate how test using glitter and tube (cover end of the toilet paper tube with a piece of fabric, using elastic band, put some glitter or flour in it and blow air in the tube, using a baster tool or pipette).

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20 mins



Main Activity:

Children test different materials in groups using the pipette/baster tool, toilet tubes and glitter/flour (in groups, one group test plastic, another test hessian, another test thin fabric and thick fabric, etc). Record their findings on the sheet (attached).

Come back and report on which material is most suitable. Discuss why plastic and paper, although they don't let glitter through, are not suitable for a face mask/covering (breathable, and paper can get wet/get ripped, not flexible to cover the face). Discuss why very thick fabric may not be a good choice, perhaps two layers of thick fabric instead?

Children record their findings on the sheet. They choose a material to cut and stick on their design poster. Explain the suitability of material.

Include How to wear a Face mask/covering correctly points (cover mouth and nose, don't touch your face). Wash/sanitise hands before putting the mask on, and after taking it off. Take it off carefully, by touching ear loops and not touching the part that was covering your mouth and nose.

Optional: As a class, choose a suitable material and make a face mask/covering for teddy. This is a simple design that requires a piece of fabric and a big elastic band. See demo pictures in PowerPoint.

Plenary:

5 mins



- What have we learnt about face masks/coverings? How do they stop transmission of the virus?



Possible Extension Activities:

- Make a poster showing how to wear a face covering correctly.

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Worksheet

Design a Face Mask/Covering for Teddy

List the materials you tested and whether you found them suitable for a face mask/covering?

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-
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This is a suitable material for a face mask/covering, because:

Now put a face mask/covering on Teddy. Make sure he wears it correctly!



Remember to:
