Year 1-2

Vaccines

Objectives:

- To explain in simple terms how a vaccine works

Curriculum Links:

Science: *using their observations and ideas to suggest answers to questions*

Key Vocabulary:

- vaccine
- immune system
- germs
- antibody

Resources:

- PowerPoint
- A selection of objects to find
- A long piece of card to make a vaccine headband

Optional: printouts of the matching pairs game

FAQs:

What is a vaccine made of?

The main ingredient of a vaccine will be a very small amount of the killed, greatly weakened or broken-down parts of the germ (bacterium or virus) you are vaccinating against. Other ingredients are added to keep the vaccine stable while it is stored.

Can everyone have a vaccine?

Most vaccines are suitable for everyone. Some vaccines may not be developed for use in children or be suitable for people who have a health condition or treatment that impairs the function of their immune system. If a person is poorly or has a fever, then their vaccination may be postponed until they are better.

What is a booster vaccine?

For some vaccines a further round of exposure to the vaccine is required to increase (or 'boost') immunity against the disease. Immunity against some diseases can fade over time and it is important to keep up to date with booster vaccines to ensure as good protection as possible.

One example of routine childhood vaccinations is MMR vaccine. The first dose is given at the age of **12 months** and the second dose is given at around three years and four months, before starting school. Having both doses gives long lasting protection against measles, mumps and rubella.

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Introduction:

5 mins

Ask the children if they know why we have vaccines? Make a note of their answers. They may recall having preschool booster vaccines or flu nasal spray vaccine.

Watch COVID-19 Warrior video introduction.

Main Activity:

15 mins

Play “Cold, cold, hot” game

- Have a selection of objects to represent germs *(or use printed out pictures of germs, attached).*
- Hide one object/germ so a child who is chosen to find it cannot see it. Child has a go at trying to find this object without any help.
- Time how long it takes to find the object.
- Now hide this object again, but this time choose another child to wear a 'Vaccine' headband/hat (this can also be done as whole class activity, with every child making a headbands, so they would all join in with helping to guide the ‘Finder’).
- Child(ren) wearing vaccine headband to help by saying hot/warm/cold/warmer etc. to help the ‘Finder’ find the germ.

Plenary:

5 mins

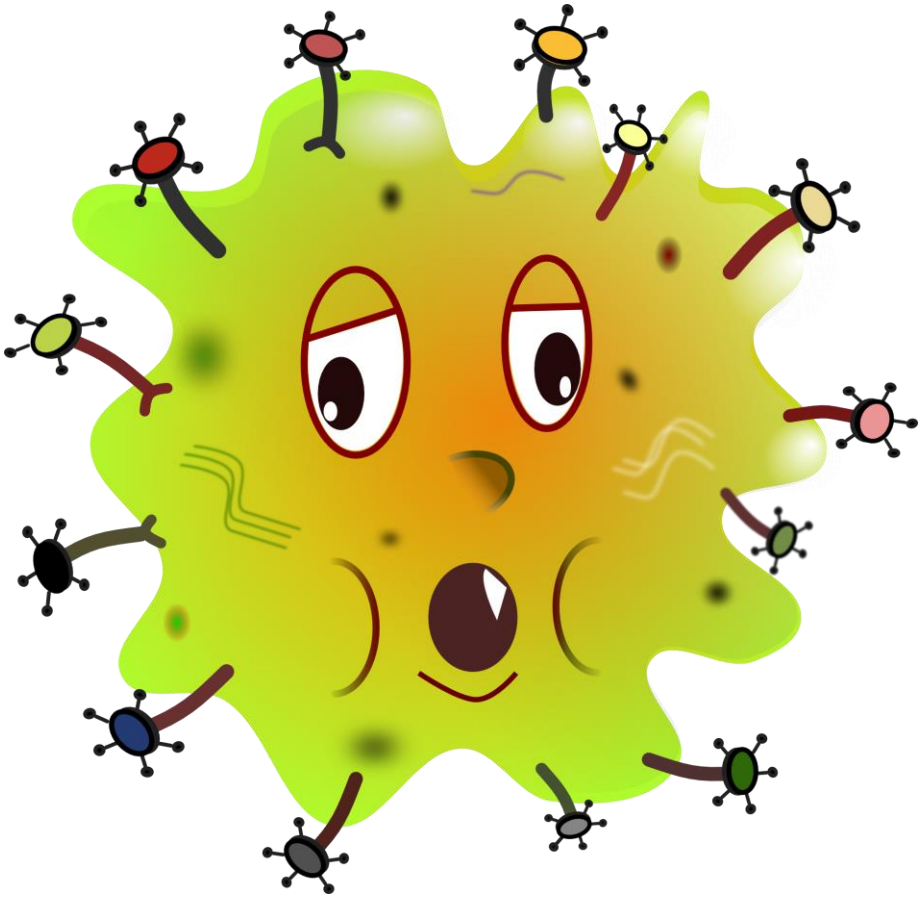
Ask the children which was easier/quicker - to find the hidden germ with or without the help of the vaccine? Why? What did the vaccine do?

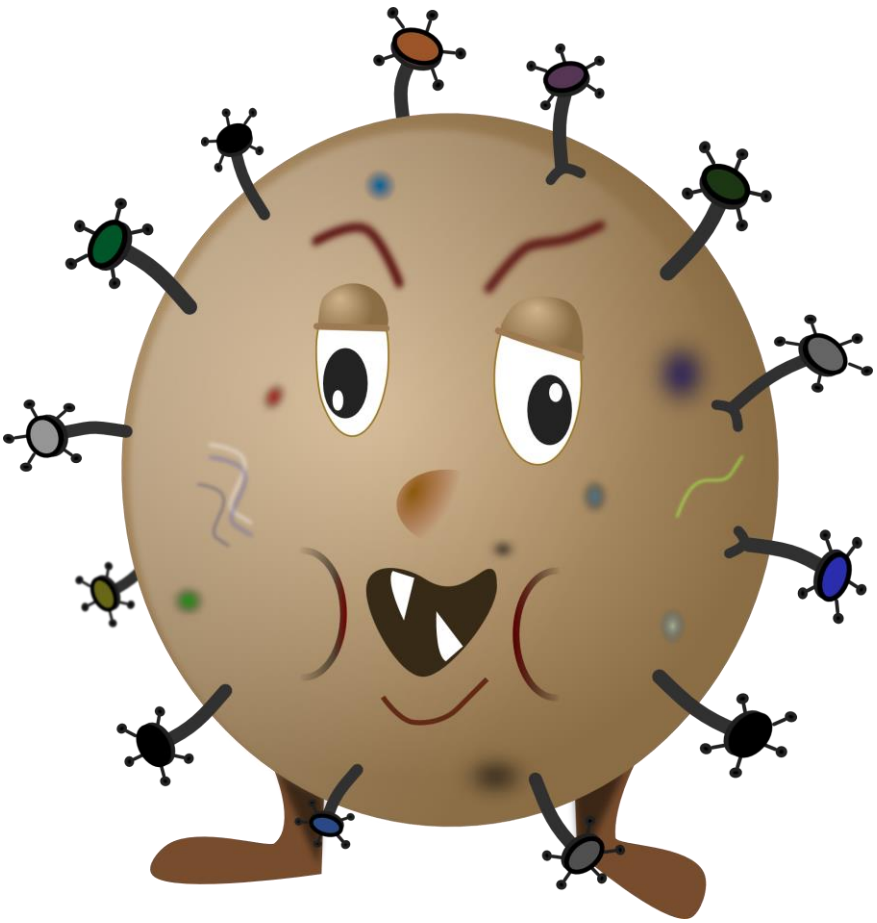
(vaccines hep our body to detect (recognise) a certain germ that entered our body and make the right antibody to fight the germ)
Use vocabulary – vaccine, detect/find, germ.

Possible Extension Activities:

- Set up a lab – selection of pots, pipettes, paint – to create vaccines
- Matching Pairs memory game – game description and printable cards attached

Germs for ‘Hot, Hot, Cold’ game (print and cut out individual germs)





Year 1-2

Matching Pairs memory game

Aim:

To show that for every new germ the body meets, we have to make a specific antibody to match the germ, in order to kill it. Vaccines enable us to gain a memory of the antibody needed to kill a particular germ.

How to make:

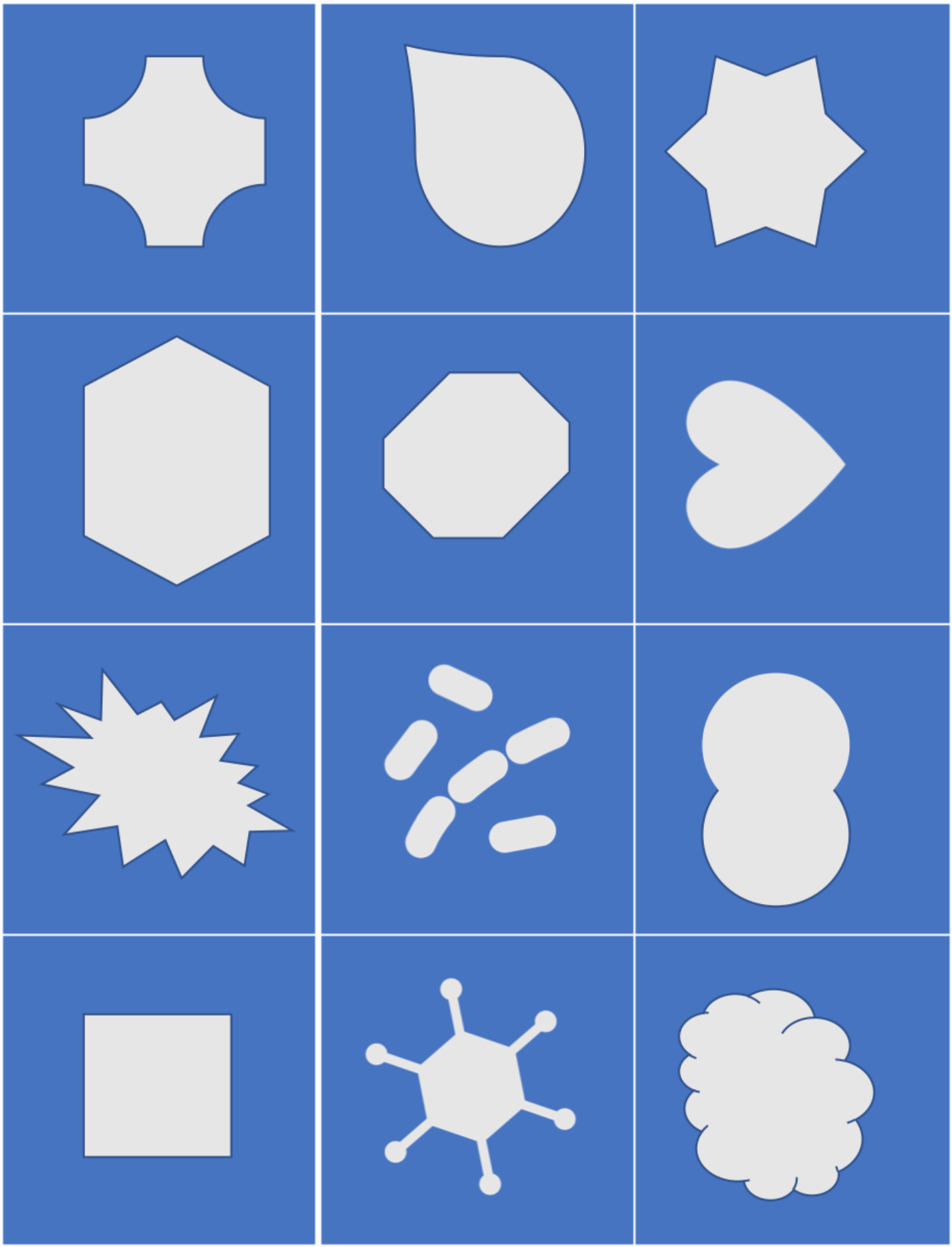
Print out and laminate matching ‘antibody’ and ‘germ’ cards, cut into individual cards.

How to play:

Turn cards face down and spread them on the table. Pick up two cards. If they match correctly - keep them, facing up. Incorrect pairs, turn back over.
As the game goes on, the players will become faster, because they will learn which antibody cards match which germs, and remember where the cards are - just as the immune system learns which antibody to make for which germ.

Matching Pairs Memory Game

Print out, laminate and cut into individual cards



Matching Pairs Memory Game

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