COVID-19 vaccinations learning resource

Upper Key Stage 2

February 2021

KEEP LONDON SAFE

Refer to teacher notes at the bottom of each slide

NHS

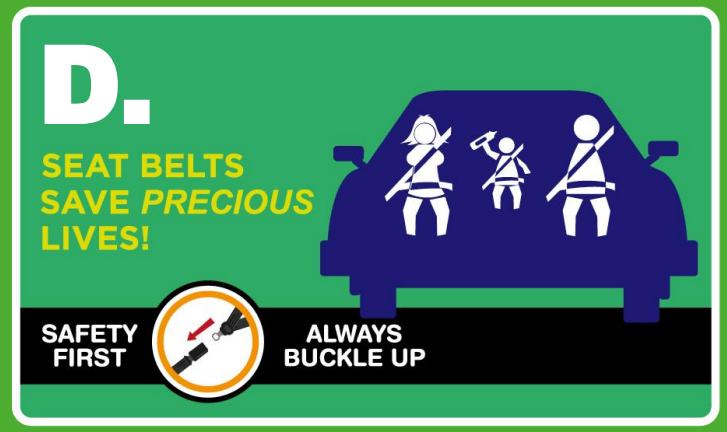
- Coronavirus is a **virus** that causes an **illness** called COVID-19
- A virus is type of **microorganism**
- There are 3 different types of microbes:
  - **viruses**
  - **fungi**
  - **bacteria**
- Viruses are even smaller than bacteria and can sometimes live inside bacteria
- Some viruses make us sick
- **Diseases** like chickenpox and flu are caused from viruses
- Some viruses like coronavirus can spread from one person to another

Smoke alarms

Anti-smoking campaigns

Which of these measures saves the most lives every year?

Vaccinations



Compulsory seat belt wearing

Answer: Vaccinations

All of four of these measures save lives, however, **vaccinations** save more lives than the other three put together.

The World Health Organization estimates that vaccinations save 2 million lives a year.

What is a vaccine?

What is a vaccine?

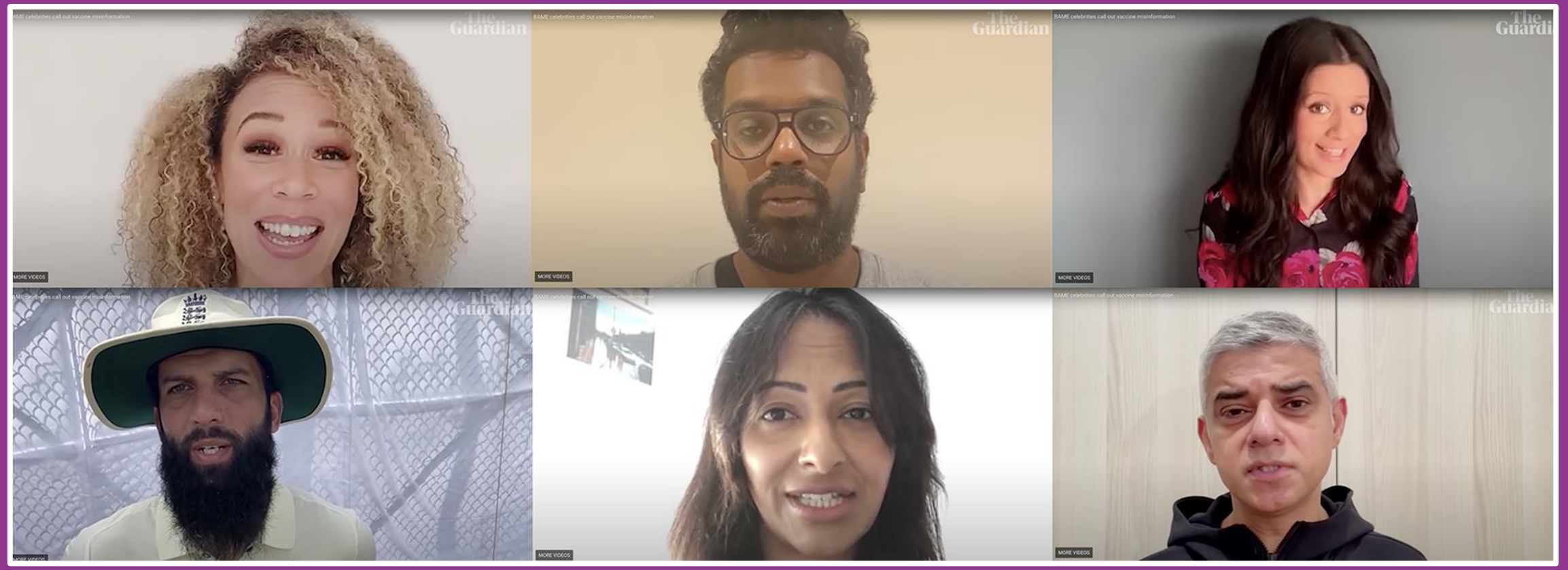
- A **vaccine** is a medicine which protects people from getting a disease. Vaccines are made from dead or inactive versions of **viruses** or **bacteria.**
- Vaccines stimulate the body's **immune system** to produce chemicals called **antibodies** which can prevent illness. Vaccines themselves cannot give you the disease.
- A vaccinated person should be able to produce the correct antibodies very quickly and therefore fight the disease.

Margaret Keenan was the first person in the world to receive a COVID-19 vaccine on 8th December 2020.

If your GP offered you the vaccine for COVID-19 today, would you take it?

Do you know someone who has received the COVID-19 vaccine?

Facts vs Myths



[The-Guardian-BAME-celebrities-vaccine-misinformation]

Decide which statements are true and which are statements of misinformation

The vaccine contains the **live** virus

The vaccine has been through strict **processes** and **regulations**

In the UK, they're being given to the **most vulnerable** people, like grandparents and hospital staff, first, because they are at the **highest risk** of catching coronavirus

*Some people have **already received** the vaccine*

*Vaccines give people **protection** from the virus*

The vaccine contains pork

The vaccine works **differently** on people from **ethnic minority backgrounds**

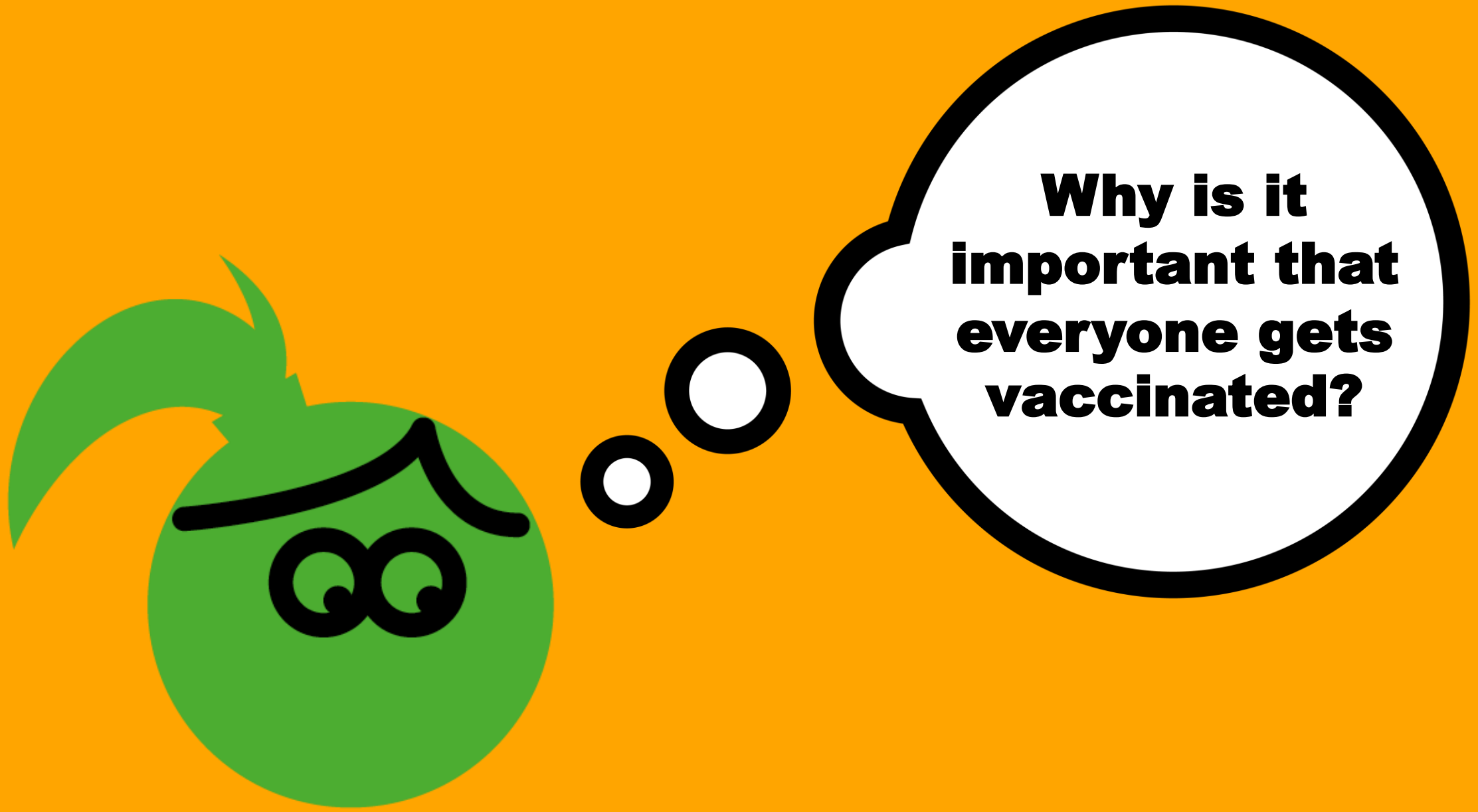
Did you choose correctly?

True facts

- The vaccine has been through strict **processes** and **regulations**
- Vaccines give people **protection** from the virus
- In the UK, they're being given to the **most vulnerable** people, like grandparents and hospital staff, first, because they are at the **highest risk** of catching coronavirus
- Some people have **already received** the vaccine

False statements

- The vaccine contains the **live** virus
- The vaccine works **differently** on people from **ethnic minority backgrounds**
- The vaccine contains pork


Why is it important that everyone gets vaccinated?

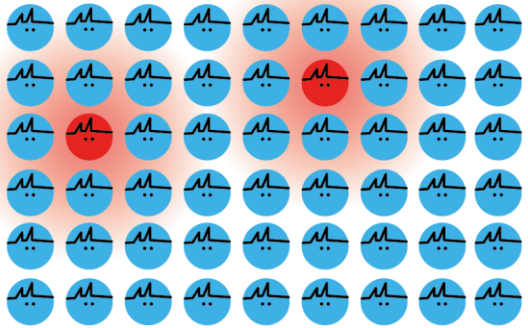
What do these diagrams show?

= not vaccinated but still healthy

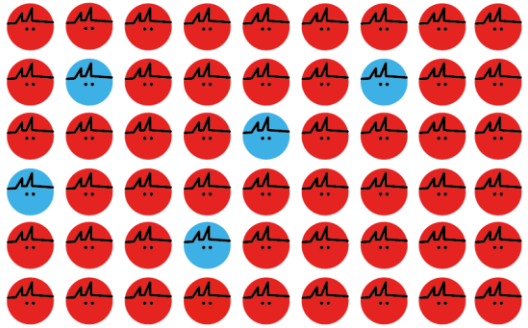
= vaccinated and healthy

= not vaccinated, sick and contagious

A.

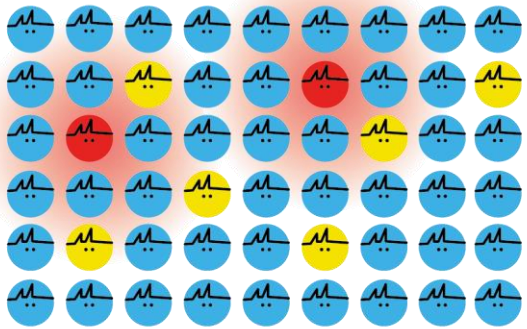


No one is vaccinated

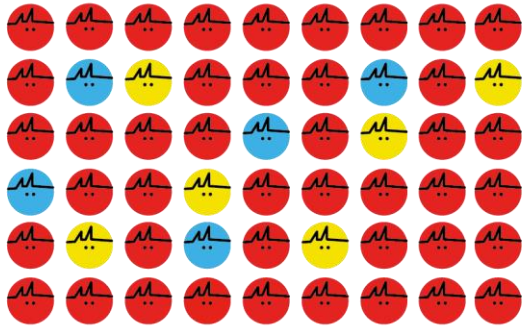


Contagious disease spreads through the population

B.

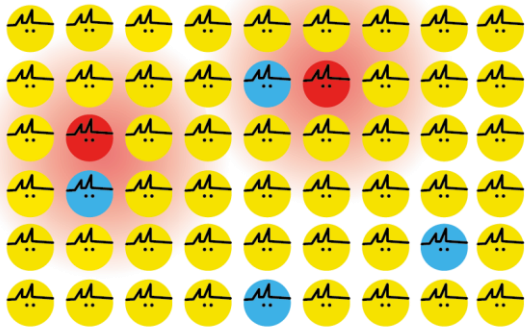


Some of the population gets vaccinated



Contagious disease spreads through some of the population

C.



Most of the of the population gets vaccinated

Spread of contagious disease is contained

This table shows when children in the UK are scheduled to receive different vaccinations

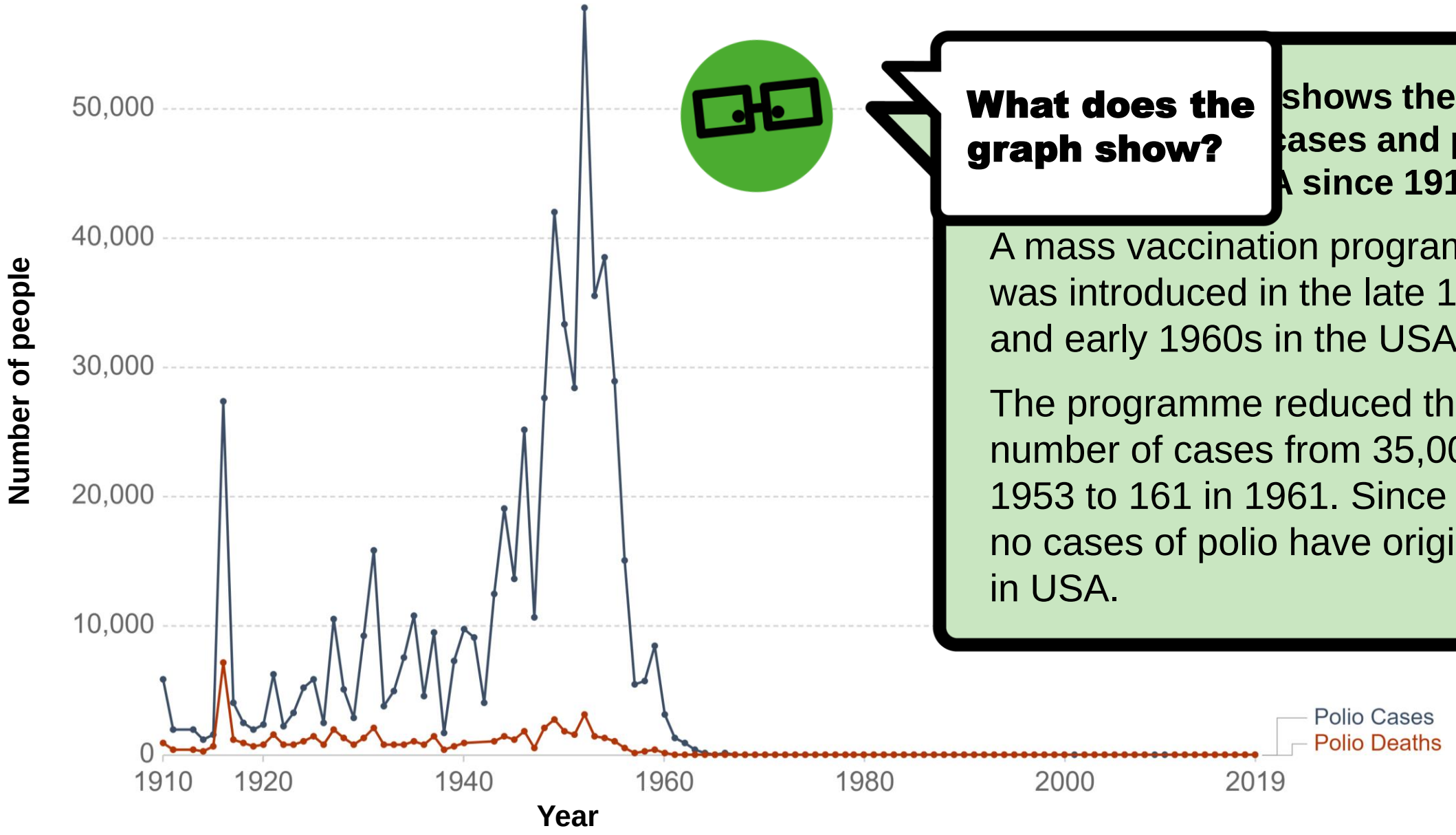
Age due	Disease protected against
8 weeks old	- Diphtheria, tetanus, pertussis (whooping cough), polio, Haemophilus influenza typ B (Hib) and Hepatitis B - Pneumococcal (13 serotypes) - Meningococcal group B - Rotavirus gastroenteritis
12 weeks old	- Diphtheria, tetanus, pertussis and polio, Hib and hepatitis B - Rotavirus
16 weeks old	- Diphtheria, tetanus, pertussis and polio, Hib and hepatitis B - Pneumococcal (13 serotypes) - Meningococcal group B
1 year old (on or after the child's first birthday)	- Measles, mumps and rubella (German measles) - Hib and Meningococcal group C - Pneumococcal - Meningococcal group B
3 years 4 months old (or soon after)	- Diphtheria, tetanus, pertussis and polio - Measles, mumps and rubella

How do we eradicate a particular disease?

Polio is an infectious disease caused by a virus. It used to be very common around the world.

In some cases, the Polio virus attacked nerves in the spine and the base of the brain, which could lead to paralysis of the legs.

Polio vaccination programme in the USA



What does the graph show?

shows the
ases and polio
A since 1910.

A mass vaccination programme was introduced in the late 1950s and early 1960s in the USA.

The programme reduced the number of cases from 35,000 in 1953 to 161 in 1961. Since 1979, no cases of polio have originated in USA.

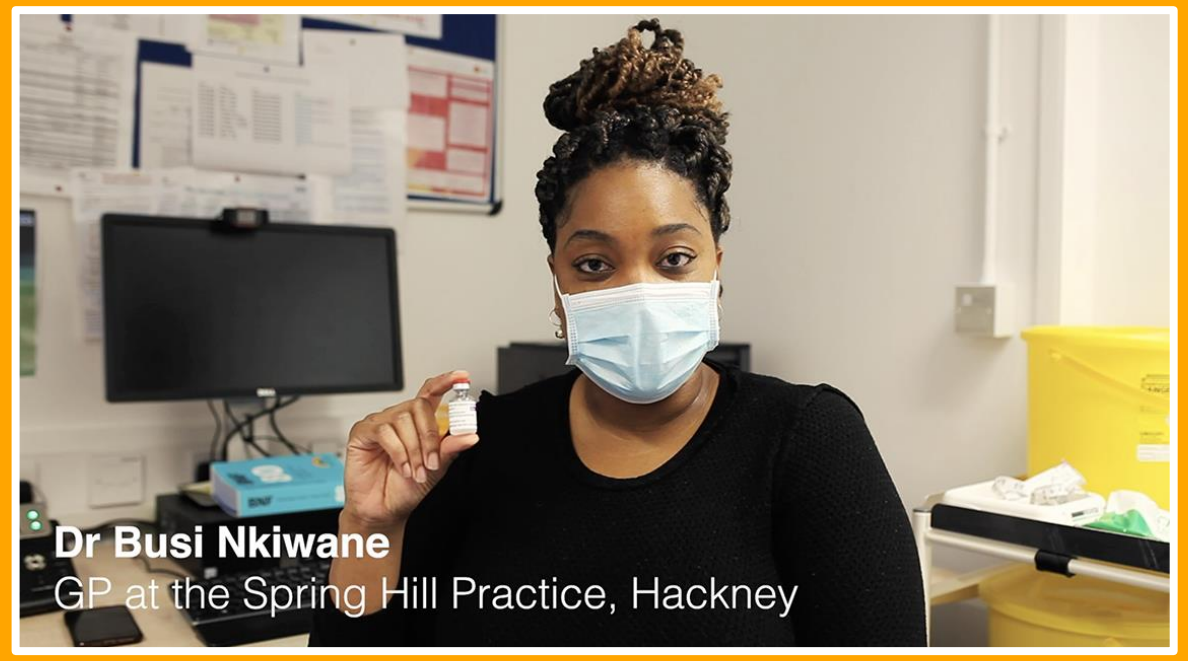
How have COVID-19 vaccines been made

There are three COVID-19 vaccines which have already been approved by the MHRA. The MHRA regulates medicines, including vaccines, in the UK

Name of COVID-19 vaccine developer	Volunteers tested in vaccine trials*	Date approved for use in UK by MHRA
Pfizer / BioNtech	More than 46,000 in USA, Germany, South Africa, Turkey, Brazil and Argentina	2nd December 2020
Oxford – AstraZeneca	More than 23,000 in the UK, Brazil and South Africa	30th December 2020
Moderna	More than 30,000 in USA	8th January 2021

*Volunteers taken from a range of ages and ethnicities

How have COVID-19 vaccines been made so quickly and yet safely?



[Dr Busi Nkiwane, GP at Spring Hill Practice, Hackney]

[Maurice Mcleod, Chief Executive Race on the Agenda]

Thoughts on the COVID-19 vaccine

What are the key messages from these two videos?

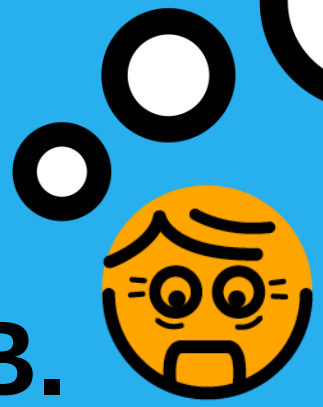
All of these people have concerns about being vaccinated against COVID-19.

Discuss how you would explain to them the importance of having the vaccine.

A.

The vaccine might give me COVID.

B.

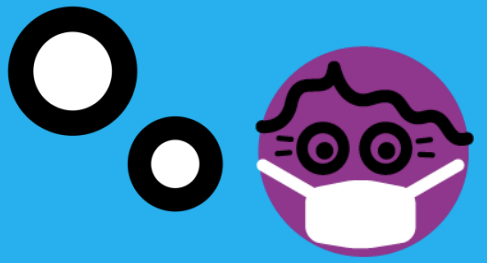


I will wait a few years before I decide. I'm not scared of coronavirus anyway.

C.

The vaccine has things in it that I disagree with.

The vaccine hasn't been tested properly. I'm worried about the side effects.



D.

Acknowledgements and sources

Acknowledgements

These teaching resources were created by Hackney teachers and education specialists, for London schools, with help from the students of Stoke Newington School, as part of the Keep London Safe campaign.

HACKNEY EDUCATION

Hackney

Sources

http://www.who.int/publications/10-year-review/vaccines/en/

Polio photo – Courtesy of Boston Children's Hospital Archive:
https://www.npr.org/sections/health-shots/2012/10/16/162670836/wiping-out-polio-how-the-u-s-snuffed-out-a-killer?t=1611088331342

Polio graph:
https://ourworldindata.org/polio

Information relating to vaccine trials
https://www.pfizer.com/science/coronavirus/vaccine

https://theconversation.com/oxford-scientists-how-we-developed-our-covid-19-vaccine-in-record-time-153135

https://www.nih.gov/news-events/news-releases/promising-interim-results-clinical-trial-nih-moderna-covid-19-vaccine

KEEP LONDON SAFE

NHS