



Objectives

At the end of this lesson I should be able to:

- Recognise the role scientists played in the COVID-19 pandemic
- Describe how scientists conduct trials to develop new treatments
- Identify the advantages of taking part in scientific research

| Start of lesson | | | End of lesson | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Confident | OK | Not so sure | Confident | OK | Not so sure |
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Complete this section at the end of the lesson

What new things have you learnt today?

How well did you understand today's material?

What skills have you used today?

What will you make sure you remember from today?

Activity 1: Where do you stand on current health issues?

Read the following statements and decide how much you agree or disagree with each. Position yourself on the class line and fill in the scales below.



1. **All unhealthy food outlets should be banned within one mile of schools.**



2. **It is suggested the production of meat is causing more greenhouse gases which harm the planet. Meat eating is killing our planet.**



3. **The COVID-19 vaccine should be made compulsory for everyone**



Activity 2: How would you define health?

What is the World Health Organisation (WHO) definition of health?



What is significant about this definition?





Where did it come from? How does it spread?

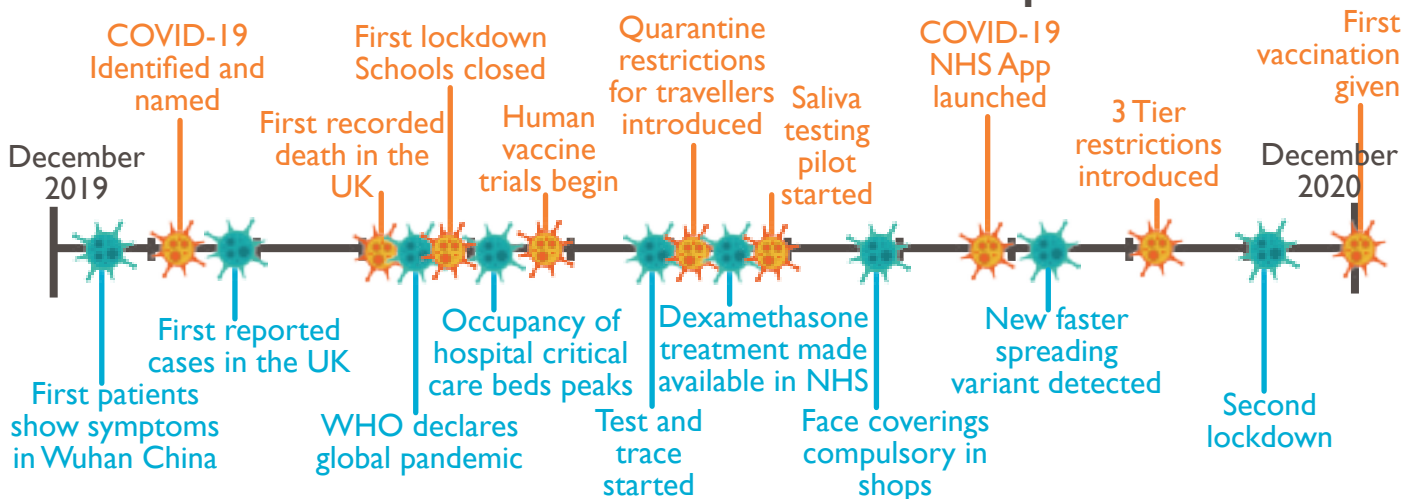
What can I do to reduce my risk from the virus?

Science has played an important role during the pandemic in finding the answers to many of these questions, coming up with solutions to the problems, and in developing new equipment, tests, treatments and medicines.



Coronaviruses are a group of viruses that cause illnesses ranging from the common cold to more severe respiratory diseases. COVID-19 is the illness caused by one particular coronavirus called SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), but to reduce communication errors, the WHO calls it “the virus responsible for COVID-19”.

Timeline for the first 12 months of the COVID-19 pandemic:



Activity 3: What role did science and research play in the COVID-19 pandemic?



Discuss as many examples of the ways you can think of that the scientists were involved.





Activity 4: Vaccines and trials



All new treatments' have to be tested in clinical trials.

Meet Dr Alasdair Munro who is working on a new COVID-19 vaccine and Ruth who volunteered to take part in the trial.

There are strict criteria for people who want to volunteer to take part in clinical trials. Look at the case studies from people applying to take part in a trial to test for a new vaccine, who would you choose to take part and why?



| Candidate | rejected or accepted | Reasons why |
|-----------|----------------------|-------------|
| | | |
| | | |

Activity 5: Could you participate in scientific research?



Most people engage with scientific research through news headlines, social media and some as patients through clinical trials.

This is called PPI (Patient and Public Involvement)

How do you think the views of young people can help the research being carried out?

How could young people benefit from taking part?

What might put young people off taking part?



Find out more about clinical trials and research in Southampton at:

www.uhs.nhs.uk/Research/Research.aspx

Homework task: Ready for the next lesson, photograph or write down everything you eat in one day and take a photo showing the inside of your fridge.