

Teacher Resource

COVID-19 Vaccine

Focus Questions

1. What did the BTN story explain?
2. What Australian university does Millie's parents work at?
3. Complete the following sentence. A vaccine is something that we use to try and protect people from _____.
4. What diseases did people used to get before we had vaccines? Name one.
5. Why is it important to find a vaccine for COVID-19?
6. How is a vaccine made? Describe using your own words.
7. How long does it usually take to make a vaccine?
8. A vaccine is only given to healthy people. True or false?
9. What is a human trial?
10. What questions do you have after watching the BTN story?

Activity

Discussion

After watching the BTN *COVID-19 Vaccine* story, have a discussion about what students know about vaccines and what they have learnt. Below are some discussion starters:

- What is a vaccine?
- What vaccines do you know about?
- What vaccines have you received?
- What impact have vaccines had on controlling disease?
- How do vaccines work?
- Why is it important to find a vaccine for COVID-19?
- How long does it take to make a vaccine?
- Do you think vaccines are important? Why?

Activity

Glossary

Students will brainstorm a list of words that relate to the BTN *COVID-19 Vaccine* story and then add to the glossary as they learn more about vaccines. Students will use the words to write their own sentences about vaccines. Students may want to use pictures and diagrams to illustrate the meaning and create their own glossary. Below are some words to get you started.

Key Learning

Students will develop a deeper understanding of what vaccines are and their role in reducing the spread of disease.

Curriculum

Science – Years 5 & 6

Scientific knowledge is used to solve problems and inform personal and community decisions.

Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts.

Science – Year 7

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations.



Virus	Antibodies	Vaccine
Herd immunity	Immune system	Antigen
Infection	Disease	Pathogen

Activity

Six Hat Thinking

Working in pairs, students use Edward De Bono's *Six Hat Thinking* to explore the issues raised in the BTN *COVID-19 Vaccine* story. Ask students to respond to the following questions:



feelings and emotions

How did the *COVID-19 Vaccine* story make you feel?



facts and information

What do you know about vaccines?
What have you learnt from the story?



positives

Were there any positives from the story? If so, what were they?



negatives

What are some of the negatives or challenges that you learnt from the story?



creativity

Why is it important to find out more about the issue?



thinking about thinking

What questions were raised during this activity?
What do you want to learn further about this topic?

Activity

Jigsaw learning activity

In this activity students will work cooperatively to learn more about vaccines and how they have helped prevent disease in the community. Each group will become experts and then share what they have learnt with other students. Please note: If students are learning from home, they can choose one vaccine to research and become an expert.

Form groups

Divide the class into 7 groups. Each group will be assigned a different vaccine which has been developed to prevent one of these diseases (*Polio*, *MMR (measles, mumps, rubella)*, *diphtheria*, *tetanus*, *whooping cough*, *hepatitis B* or *chicken pox*) and become an expert. Each group will need to decide how they will collect and communicate the information they find during their research.

Research

Each group will respond to the following questions to become experts:

- What disease is the vaccine for? Describe the disease.
- When was it developed? And by who?

- How does the vaccine work?
- How often should a person be vaccinated?
- What impact has the vaccine had on controlling the disease worldwide?
- What are some interesting facts about the vaccine?

Share

One student from each of the expert groups will form a new group to share the information they have collected. Students will make sure there is one expert from each group at their table. Students will share the information they have collected and learn from one another.

Reflect

Students will reflect on the activity by responding to one or more of the following questions:

- What did you enjoy about this investigation?
- What did you find surprising?
- What would you do differently next time?

Activity

Who is Edward Jenner?

Students will watch this [Horrible Science](#) video to learn about Edward Jenner a scientist who helped to develop the smallpox vaccine. After students have watched the video they will respond to the following questions:

1. Who is Edward Jenner?
2. When and where did he die?
3. What animal did Edward Jenner use to help develop the smallpox vaccine?
4. Who did Edward Jenner test his theory on?
5. How did he test his theory?
6. Why is clinical research important?

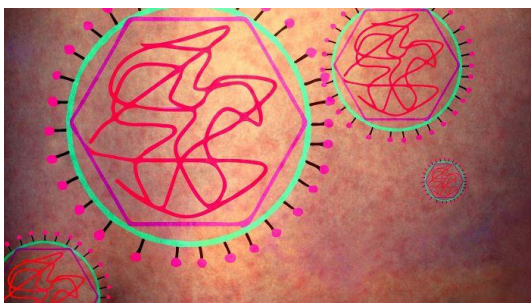


Who is Jenner Edward? – Horrible Science
<https://www.youtube.com/watch?v=Z60DUaTShp4>

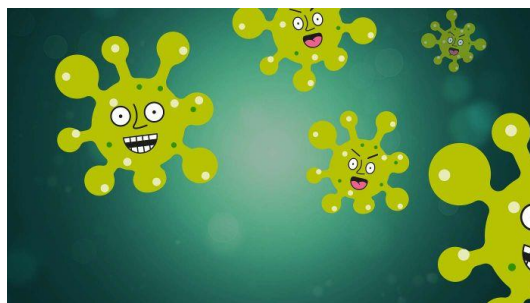
Activity

BTN Stories

Students will watch one or more of the following BTN stories to learn more about vaccines, vaccinations and reducing the spread of disease. After watching any one of the BTN videos ask students to respond to the discussion questions (to find the discussion questions and teacher resources go to the related BTN Classroom Episode and download the Episode Package).



[BTN Rubella Vaccination Success story](#)



[BTN Flu Vaccine story](#)



[BTN What is a Virus story](#)



[BTN Vaccination Debate story](#)

Useful Websites

What is a Virus? – BTN

<https://www.abc.net.au/btn/classroom/what-is-a-virus/12066096>

COVID-19 Explained – BTN

<https://www.abc.net.au/btn/classroom/coronavirus-explained/11933838>

Flu Vaccine - BTN

<https://www.abc.net.au/btn/classroom/flu-vaccine/10522188>

Rubella Vaccination Success – BTN

<https://www.abc.net.au/btn/classroom/rubella-vaccination-success/10611728>

Human Coronavirus vaccine trials underway in Britain – ABC News

<https://www.abc.net.au/news/2020-04-24/human-coronavirus-trials-underway-in-britain/12180506>

Newsbreak vaccine

<https://www.abc.net.au/btn/newsbreak/btn-newsbreak-20200402/12115922>

Who is Edward Jenner? – Horrible Science

<https://www.youtube.com/watch?v=Z60DUaTShp4>