

Activity

Episode 16
10th June 2014

Blood Donors

Key Learning

Students will develop an understanding of the components of blood, different blood types and ways to encourage people to donate blood.

The Australian Curriculum

Science / Science as a Human Endeavour / Use and influence of science

Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives (ACSHE083) Year 5

Science / Science as a Human Endeavour/Use and influence of science

Scientific understandings, discoveries and inventions are used to solve problems that directly affects peoples' lives (ACSHE100) Year 6

Discussion Questions

1. What have you learned about donating blood as a result of watching this story?
2. How many years have we been celebrating World Blood Donor Day? Why is it important?
3. How many people will need a blood donation in their lifetime?
4. Why did the nurse check Emma's blood pressure?
5. Riley is donating whole blood. What does that mean?
6. Which people do most blood donations go to?
7. Where does the blood go once it's taken out and what happens to it?
8. How many litres of blood are in Emma's body? How much is plasma?
9. How many different types of blood groups are there? Which is the most common?
10. Which blood group is special? Explain why.

Activities

Discuss

Hold a class discussion about the key points in the BtN *Blood Donation* story. Ask students if they know anyone who has either donated blood or have received a blood donation. What else do they know about blood and blood donation? As a class, create a mind map using post-it notes or use InstGrok to research the topic of blood using an interactive mind map <http://www.instagrok.com/>

The Parts of Blood

Can you match the following words to their correct meanings?

Plasma

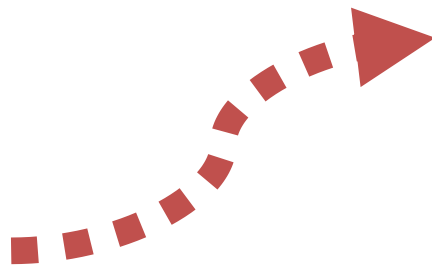
Red blood cells

White blood cells

Platelets

Bone marrow

Haemoglobin



The most common blood cells. They carry oxygen in the blood.

Helps the blood to clot at a wound.

Found in red blood cells. Helps red blood cells carry oxygen

The liquid that carries the different types of cells found in blood.

The cells that defend the body against infection.

The spongy tissue where blood cells are produced.

Blood Types

Students will respond to one or more of the following questions to find out more about blood types:

- Human blood is grouped into four types. What are they?
- What are the most common and least common blood types in Australia? Create a graph to show percentages.
- What blood types can be given during an operation? Create a table or infographic to show the matches.
- Where do we get our blood type from?
- Where did blood typing come from?

Students can find out more about blood typing game by having a go at one of the following games:

<http://www.nobelprize.org/educational/medicine/bloodtypinggame/game/index.html>

Blood type game – American Red Cross

<http://www.redcrossblood.org/donating-blood/donor-zone/games/blood-type>

Raising Awareness

Discuss the reasons why blood donation is important. Students create a billboard poster that encourages people to donate blood. Their poster can be displayed in a public space in the school, for example, the Library or Front Office.



Poster art

- What is your message? (is the purpose of your poster to advertise, educate, motivate, change behaviour or attitudes or a combination)
- Who is your target audience? What is the age, demographic etc?
- How will your poster have the most impact? Consider font, images and colour.
- Conduct research to find the latest information/facts.
- Make your poster

Further Investigation

Choose one of the following statements to respond to

Most people say that blood donation is a good thing but fewer people actually do it.

People should be paid to give blood.

Related Research Links

Behind the News – Blood Donors

<http://www.abc.net.au/btn/story/s2594275.htm>

Australian Red Cross – Blood Buddies

<http://www.bloodbuddies.com.au/index.html>

Child and Youth Health - Blood

<http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=152&id=2250>

Australian Red Cross – Blood Types

<http://www.donateblood.com.au/about-blood/types>

KidsHealth – Information about blood types

http://kidshealth.org/kid/word/b/word_bloodtype.html

Nobelprize.org - Blood Typing Game

<http://www.nobelprize.org/educational/medicine/bloodtypinggame/game/index.html>