

Teacher Resource

Episode 5 12th March 2019

Life in Antarctica

O Focus Questions

- 1. Briefly summarise the BTN Life in Antarctica story.
- 2. Antarctica is the coldest, driest and windiest place on Earth. True or false?
- 3. About how many people work in Antarctica with the Australian Antarctic Division?
- 4. Describe the clothing worn by people in Antarctica.
- 5. What is the name of the station where Emma stayed?
- 6. What types of jobs do people do in Antarctica?
- 7. How do they grow veggies in Antarctica? Use words or pictures to explain.
- 8. Why can't they bring soil from Australia to grow plants in?
- 9. What are some of the disadvantages of living in Antarctica?
- 10. What questions do you have about Antarctica?

Key Learning

Students will explore why people live and work in Antarctica.

@ Curriculum

HASS - Year 5

The environmental and human influences on the location and characteristics of a place and the management of spaces within them.

Activity

Class discussion

Before watching the BTN *Life in Antarctica* story students will brainstorm a list of questions they have about Antarctica, in particular what it's like to live in Antarctica. For example:

- Why do people live in Antarctica?
- How do people get to Antarctica?
 What type of transport is used to get to Antarctica?
- How many people live in Antarctica?
- What type of clothes do people wear in Antarctica?
- · What animals live in Antarctica?
- What type of jobs do people do in Antarctica?
- What are the conditions like in Antarctica?

Which of your class's questions were answered by the BTN story? What questions weren't answered that your students want to explore in more detail? Students will use the KWLH organiser below to help organise the questions raised in your class discussion and find out the gaps in their knowledge.







KWI H

The KWLH organiser provides students with a framework to explore their knowledge on this topic and consider what they would like to know and learn.

What do I <u>k</u> now?	What do I <u>w</u> ant to know?	What have I learnt?	<u>H</u> ow will I find out?

Topic for inquiry – Living in Antarctica

Students will determine a focus for their inquiry into Antarctica (in particular living in Antarctica) and develop a key question to guide their inquiry (below are some example key questions). Students will collect and record information from a wide variety of sources (internet, books, newspaper and magazines).

- How has living and working in Antarctica changed over time? Analyse how transport, accommodation, communication and clothing has changed. Write a news article reporting on the first expedition to Antarctica and then write a news article reporting on an expedition to Antarctica today.
- What impact do people have on Antarctica? Think about some of the ways that humans might impact the environment. For example, buildings, food, energy, transport and waste. How could people reduce their impact on Antarctica?
- Who owns Antarctica? Explore which countries have territorial claims in Antarctica and draw on a map. Draw flags on your map to represent each of the countries with territorial claims in Antarctica.
- Describe Australia's connection to Antarctica. Create a timeline showing major expeditions and discoveries made by Australians in Antarctica.
- What is the Antarctic Treaty? What is the main purpose of the Antarctic Treaty? Explore what makes
 Antarctica unique in relation to its rules and the way it is run. Make a poster for World Antarctica Day
 (1st of December), which celebrates the continent and marks the day that the Treaty was signed.
- What do you think an Antarctic winter would be like and how would it influence the people that live in Antarctica? Think about sunlight, temperature and landscape. What changes do you think you would see as the seasons change from autumn to winter and winter to spring? Watch this <u>ABC Splash</u> video to learn about the changes of seasons in Antarctica.





Visiting Antarctica

Students will imagine they will be visiting Antarctica to complete a mission. Below is a suggested framework for their research. Before starting this activity, students will brainstorm a list of jobs that people do while living in Antarctica and then choose one role they would like to explore in more detail.

During this activity students will visit the <u>Australian Antarctic Division's website</u> on living and working in Antarctica. This website is an important reference for expeditioners before they depart for Antarctica, and anyone seeking information on the unique challenges of living and working on station and in the field.

Prepare

Make a list of what you will need to take with you on your expedition. Consider clothing, scientific equipment and tools. What other resources will you need while in Antarctica? Estimate the amount of food, water and energy you will need daily. What can't you take on your expedition to Antarctica?

Where will you be based in Antarctica? Will your work be based in the station, field or both? Describe the living conditions.

'Visit' Antarctica via webcam to investigate the environment and weather conditions. Explore the various webcams looking at the environment from different angels, close-up or faraway. You may want to write notes and sketch what you see to help in the planning of your expedition.

The journey

Organise your journey to Antarctica. Consider what modes of transport you will use to get there and how long it will take. Plot your journey on a map. Refer to this <u>distance map</u> to calculate approximately how far you need to travel. Create an itinerary for your journey. How long will you be in Antarctica?

Living in Antarctica

Respond to these questions about living in Antarctica:

- What activities will you be doing while in Antarctica?
- What are some of the challenges?
- What might you see whilst in Antarctica?
- How is living in Antarctica different or similar to living in Australia?

Write a journal entry in your diary about your experiences. Title your entry 'A day in the life of a [insert job here] living and working in Antarctica'. Explore some real-life Antarctic experiences here.

Share Reflect

Prepare a presentation to share and compare your findings with the class.

Reflect on the investigation 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?





BTN - Mawson Expedition

http://www.abc.net.au/btn/classroom/mawson-expedition/10523694

BTN – Antarctic Icebreaker

http://www.abc.net.au/btn/classroom/antarctic-icebreaker/10522910

Australian Antarctic Division – Living in Antarctica

https://classroom.antarctica.gov.au/subjects/geography/living-in-antarctica

British Antarctic Survey – Living in Antarctica Today

https://discoveringantarctica.org.uk/science-and-exploration/living-in-antarctica-today/