

Teacher Resource

Episode 1 12th February 2019

Extreme Weather

Q Focus Questions

- 1. In pairs, discuss the *Extreme Weather* story and record the main points of the discussion.
- 2. Where is the reporter Martin from?
- 3. Where in Australia did it reach 49.5 degrees recently? Find using Good Maps.
- 4. The Bureau of Meteorology says it was Australia's hottest January in history. True or false?
- 5. Compare the temperature in Australia, Scotland and the United States in January.
- 6. What is meant by the term weather?
- 7. What is meant by the term climate?
- 8. How might a change in climate affect people?
- 9. Brainstorm a list of extreme weather events that affect people around the world.
- 10. What do you understand more clearly since watching the BTN story?

Activity

Class Discussion

Discuss the BTN *Extreme Weather* and *Fire and Floods* stories as a class. Ask students to record what they know about weather, climate and extreme weather. What questions do they have? Use the following questions to help guide discussion:

- What is the difference between weather and climate?
- What is extreme weather? Develop a class definition.
- · What makes a weather event extreme?
- What are some examples of extreme weather events in Australia?
- Give examples of extreme weather in other countries.
- How does extreme weather impact on people and the environment?
- Which parts of Australia are most affected by extreme weather?
- Can we predict extreme weather events?
- How can we prepare for extreme weather?
- Have you ever experienced extreme weather? Explain your answer.

Key Learning

Students will develop a deeper understanding of extreme weather events in Australia and the impact on people and the environment.

@ Curriculum

Science - Year 6

Sudden geological changes and extreme weather events can affect Earth's surface

Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions

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

Geography - Year 7

Causes, impacts and responses to an atmospheric or hydrological hazard.





Glossary of key terms

While watching the BTN story students will record as many key words about the topic as they can. Students then clarify their understanding of the key words by writing down what they think the word means. Students will swap definitions with a partner and ask them to add to or change the definition. Check them using a dictionary or other source.

Keyword	My definition	Dictionary definition
Weather		
Climate		
Extreme		
Heatwave		
Bushfire		
Drought		
Flood		
Cyclone		

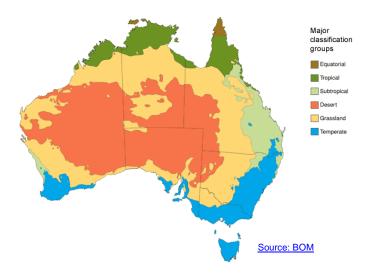
Activity

Climate zones in Australia

Students will investigate why we have different climates across Australia. Divide the class into six groups, and assign one of the following six climate zones to each group:

- Equatorial
- Tropical
- Subtropical
- Desert
- Grassland
- Temperate

Ask each group to research one of the six climate zones and present their findings in an interesting way. Using your classroom interactive whiteboard, make an enlarged version of a map of Australia and trace onto paper. Ask students to outline the states, capital cities and the different weather ones on the map.



Students can watch the <u>Ask BOM video – Why do we have different climates across Australia</u> to help with their research.





Extreme Weather Research

Define: What do I want to know? Students choose an extreme weather event to investigate.

Key questions to research

Here are some questions to help guide students' research:

- How does the extreme weather event occur?
- Which parts of Australia are most affected by the event?
- How does it affect people? What are the immediate and long term needs of people affected by the extreme weather event?
- What are some ways to help people affected?
- How is the environment affected?
- What can be done to minimise future damage?

Locate: Where do I find the information?

What resources will help answer my questions? (Internet, people, resource centre, organisations, print). Discuss with students what a reliable source is.

Select: What information is important for the investigation?

Students may need support to sort through and select relevant information.

Organise: How do I make sense of the information?

Students can organise their research by creating main headings from their questions. Write each heading on a separate piece of paper. Record the information found for each question.

Present: How do we let others know about this information?

Possible ways to present their research include:

- A 'Did You Know' Facts sheet
- Infographic
- Oral presentation
- Prezi presentation
- Create an infographic using <u>Canva</u>
- •

Evaluate: What have we learnt?

Students reflect on what they have learnt about an extreme weather event during their investigation. Students will reflect on their learning and respond to the following.

- What I learned...
- What I found surprising...
- What I would do differently next time...

☆ Activity

Visual Literacy - Queensland floods in pictures

Students look at the <u>ABC News photographs</u> of the floods in Townsville. Ask students to look at the photos and respond to the following questions:

- What is happening in the image?
- What question/s would you like to ask about the image?
- How does the image make you feel?
- Create a caption for each image.
- What does the image tell you about the impact floods have on a community?



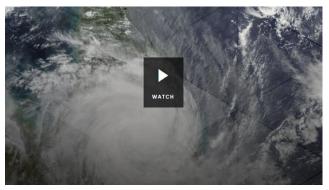
Activity

BTN stories

BTN has covered a number of stories about extreme weather events. The following videos will help students to learn more about extreme weather events.



Wild Weather



Cyclones



Drought Explained



Heatwaves



BTN Wild Weather

http://www.abc.net.au/btn/classroom/wild-weather/10536036

BTN Heatwaves

http://www.abc.net.au/btn/classroom/heatwaves/10521882

BTN - Drought Explained

http://www.abc.net.au/btn/classroom/drought-explained/10488726

BTN - Summer Floods

http://www.abc.net.au/btn/classroom/summer-flood/10533148

BTN - Cyclones

http://www.abc.net.au/btn/classroom/cyclones/10542532

ABC News – What you need to know about droughts: Why they happen and how they are defined https://www.abc.net.au/news/2018-08-01/what-you-need-to-know-about-droughts/10051956

NASA – What's the difference between weather and climate?

https://www.nasa.gov/mission_pages/noaa-n/climate/climate_weather.html

BTN Newsbreak - Record Breaking Heat

http://www.abc.net.au/btn/newsbreak/record-breaking-heat/10770226