

Teacher Resource

Emissions Target

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

- 1. What did the Emissions Targets story explain?
- 2. What is the Paris Agreement?
- 3. What year do many countries want to reach net-zero carbon emissions by?
 - a. 2030
 - b. 2040
 - c. 2050
- 4. How is Australia trying to reduce its carbon emissions? Give one example.
- 5. What questions do you have about the story?

Activity: Class Discussion

After watching the BTN Emissions Target story students will reflect on the story and then respond to the following:

- What do you THINK about what you saw in the BTN story?
- What does it mean to have net zero emissions?
- What are some ways that we can achieve net zero carbon emissions by 2050?
- Why do you think the United Nations created the Paris Agreement?
- Think of three questions you have about the BTN story.
- What are the positives and challenges of trying to reach zero emissions? Create a Tchart.



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KEY LEARNING

Students will explore how we can adapt to a changing climate.

CURRICULUM

Geography - Year 4

The use and management of natural resources and waste, and the different views on how to do this sustainably.

HASS - Year 4

Reflect on learning to propose actions in response to an issue or challenge and consider possible effects of proposed actions.

HASS – Year 5 & 6

Reflect on learning to propose personal and/or collective action in response to an issue or challenge and predict the probable effects.

HASS - Year 7

Reflect on learning to propose personal and/or collective action in response to an issue or challenge, taking into account different perspectives, and describe the expected effects.

Science – Year 4

Science knowledge helps people to understand the effect of their actions.

Science - Years 5 & 6

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

Activity: Glossary

Students will brainstorm a list of key words that relate to the BTN Emissions Target story. Below are some words to get students started.

CLIMATE CHANGE	EMISSIONS TARGET	FOSSIL FUELS
PARIS AGREEMENT	RISING SEA LEVELS	GLOBAL TEMPERATURES

Ask students to write what they think is the meaning of each word (including unfamiliar words). They will swap definitions with a partner and ask them to add to or change the definition. Check these against the dictionary definition.

Further activities for students:

- Students will add to their glossary by downloading the transcript for the BTN Emissions Target story and highlight all the words that relate to the topic.
- What other words relate to this issue? Students will choose additional keywords and concepts to
 add to their class glossary. E.g., greenhouse effect, carbon emissions, global warming, green
 energy, and net zero.
- How did this story make you feel? Make a list of words that describe how you felt after watching the BTN story.

Activity: Six Hat Thinking

As a class, use Edward De Bono's Six Hat Thinking to explore the issues raised in the BTN Emissions Target story. Make your own coloured hat cut outs and place on the floor. Students will take it in turns answering questions in relation to what they already know about the issue, what they have learned from the story and what they want to learn further about the topic. Ask students to respond to the following questions:

- How did the BTN Emissions Target story make you feel?
- What do you know about the topic?
- What have you learnt from the story?
- Were there any positives from the story? If so, what were they?
- What are some of the negatives or challenges that you learnt from the story?
- Why is it important to find out more about the problem?
- What questions were raised during this activity?
 Think of three questions you would like to ask about the story.
- What do you want to learn further about this topic?

FACTS Gather data to understand the issue or problem. CREATIVITY Express new concepts and perceptions. JUDGEMENT Spot difficulties and dangers, question the feasibility of approaches to the problem. Used to manage the process, and make sure each hat is used correctly.

Activity: Mt Resilience

Class Discussion

Before starting this activity facilitate a class discussion asking your students the following question "If we can't reach net zero by 2050, how can we adapt to a changing climate?".

Explore the features of Mt Resilience

Students will visit <u>Mt Resilience</u> – an augmented reality experience that allows students to explore a town that's been designed around climate and disaster preparedness. The app works on both phones and tablets.

Working in pairs, students will look around and explore Mt Resilience. Students will play the Mt Resilience experience to see how the community has

Mt Resilience

Authority and Printing in Authority Tools

Authority and Printing in Authority Tools

Authority and Printing in Authority Tools

Mt Resilience (ABC)

worked together to mitigate the impact of extreme weather.

Working in pairs, students will look around Mt Resilience and practise navigating their way around the town by zooming and rotating. There are several play arrows, two of which will take you to the Storm Resilient House and Fire Resilient House videos. Students will play each of the videos and explore the features of these homes.

Further Research

Students will form small groups and think about how we can build our homes and our communities to be better prepared for extreme weather and be carbon neutral. Groups will choose one of the following topics to explore in more detail.

Building Resilience

Think about how communities can build resilience to withstand climate impacts. For example, designing buildings that can withstand extreme weather events like floods or bushfires.

Activity: Research examples of bushfire resilient buildings (homes and schools) and gardens. Design a bushfire resilient house or garden using Minecraft. What are the features that make it bushfire resilient?

Water Management

What are some ways that we can manage our water resources effectively, especially in areas that are vulnerable to droughts? For example, water conservation, and developing drought-resistant crops.

Activity: Find someone who has a connection to water resource management in your area and organise an interview. Find out what they do, how water is managed and how water can be saved. Incorporate your answers into a feature article or a podcast.

Protecting Ecosystems

What are some ways we can protect our ecosystems, like our forests, wetlands and coral reefs?

Activity: Make a model of a mangrove to display in your classroom, showing its roots, seeds and creatures that live amongst the mangroves. Create a class fact file book to accompany your model which contains each student's research about mangroves.

Urban Planning

How can our cities be designed to reduce the impact of heat stress? For example, increase green spaces and cool roofs.

Activity: How hot is your school? Conduct an investigation to measure the temperatures in different locations around the school and think about solutions to cool down your learning environment.

Useful Websites

- Zero Emissions BTN
- <u>Understanding Climate Change</u> BTN
- Choose your climate future WWF
- Net Zero Coalition United Nations
- <u>Sustainability (BTN stories)</u> BTN