



Teacher Resource

Can We Live On Mars?

Focus Questions

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

1. Describe the conditions on Mars.
2. How does the environment on Mars compare to Earth's environment?
3. What would be needed to sustain human life on the Red Planet (i.e. resources, infrastructure)?
4. What are some challenges scientists need to overcome to send humans to Mars?
5. What are some of the potential benefits of sending humans to Mars?
6. Is spending money on Mars travel a good idea? Explain.

Activities

- **Life on Mars:** Plan and design a settlement on Mars that could sustain human life. Use the following questions to help your research. Further your design by creating an advertisement or poster to advertise your colony.
 - *What are the conditions like on Mars?*
 - *What needs to be considered when planning a colony on Mars?*
(e.g., Water supply, atmosphere, temperature, gravity)
 - *What materials could be used to build a space settlement?*
- **The Martian Survival Challenge:** Divide students into small teams of 'engineers'. Each team is assigned one of the below survival problems and must brainstorm solutions.

EPISODE 46

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KEY LEARNING

Students will learn about the conditions on Mars, and discuss whether living on the Red Planet is viable.

CURRICULUM

[Science – Years 7 and 8](#)

[Geography – Year 7](#)

[Earth and Environmental](#)

[Sciences](#)

Examples:

[Geography - Year 7 \(v9.0\)](#)

[Science - Year 7 \(v9.0\)](#)

[Earth and Environmental](#)

[Science – Unit 1 \(v8.4\)](#)

- *Breathable air*
- *Clean water*
- *Food production*
- *Radiation shielding*

Each team must then pitch their solutions to the class and answer any questions from other teams. The teams will then vote on their favourite.

- **Class debate:** 'Humans should colonise Mars.' Organise a class debate with one side for colonising Mars, and the other against it. Use BTN High's [School Debating](#) video resource on how to hold a debate.
- **Persuasive Essay:** Should humans live on Mars? Write an essay providing reasons why you believe or don't believe it is a good idea.