

Space

Students will use their imaginations to create an alternative world in space. Humans will need to be persuaded to depart an unsustainable Earth to a new life on Mars by 2030.

Subject area:

English

Year level:

Year 7

Learning objectives:

- Plan, draft and publish imaginative, informative and persuasive texts, selecting aspects of subject matter and particular language, visual, and audio features to convey information and ideas.
- Understand the way language evolves to reflect a changing world, particularly in response to the use of new technology for presenting texts and communicating ideas.
- Plan, rehearse and deliver presentations. Select and sequence appropriate content and multimodal elements to promote a new point of view.
- Use a range of software including word processing programs, to confidently create, edit and publish written and multimodal texts.
- Use comprehension strategies to interpret, analyse and synthesise information, critiquing ideas and issues from a variety of textual sources.

Curriculum links:

Creating texts	ACELY1725
Creating texts	ACELY1728
Language variation and change	ACELA1528
Interacting with others	ACELY1720
Interpreting, analysing, evaluating	ACELY1723

Cross-curriculum priorities - Sustainability

OI.1	The biosphere is a dynamic system providing conditions that sustain life on Earth.
OI.3	Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.
OI.4	World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice, are essential for achieving sustainability.
OI.7	Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.

General capabilities



Literacy



Critical and creative thinking



Personal and social capability



Information and communication technology (ICT) capability



Ethical understanding

> Activity 1

Inhabit the red planet?

Students are to research the many challenges of travelling to Mars, simulating solutions for their 'tourists'. But how will they ensure there is enough water for inhabitants to sustain life?

Time required:

1 hour

Resources required:

- iPad or computer per student

Preparation:

1. Ensure students have access to:
 - a. [ABC news article: What are some of the challenges of Mars travel?](#)
 - b. [Mars One](#)
 - c. [Popplet](#)

Steps:

1. As a class, read the [ABC news article: What are some of the challenges of Mars travel?](#) Discuss each section of the article, gathering student opinions on travel to the red planet.
2. In small groups, ask students to read the article again and compile a list of factors to consider in planning a safe trip to space. Factors may include lack of gravity, low temperatures, dangerous atmosphere, and communication.
3. In their groups, students then create a detailed outline simulating how they will overcome these factors to achieve safe space travel for their 'tourists'.
4. Recognising water is an essential element to survival, students will investigate [Mars One](#) and their plans to inhabit Mars.
5. Either in small groups or individually, students use the [Popplet tool](#) to summarise findings from [Mars One](#). Students need to answer how they will ensure enough water for human consumption and use throughout the landing modules to sustain life.
6. As a class, share and discuss student ideas and solutions.

➤ Extension Activity 1

Mars One

Before promoting an idea to potential buyers, any large-scale project requires a comprehensive strategic plan. Students will use the VMOST (Vision, Mission, Objectives, Strategy, and Tactics) framework to develop a plan for reaching this goal.

Time required:

1 hour

Resources required:

- iPad or computer for students

Preparation:

Ensure access to:

1. [Mars One](#)
2. [Mars One Strategy and Objectives](#)
3. Optional link to [planning tool](#)

Steps:

1. Reflecting on [Mars One](#) plans to inhabit the red planet, students summarise the Mars One Foundation's strategic plan using VMOST as a guide. Students must include the following headings:
 - a. Vision
 - b. Mission
 - c. Objectives
 - d. Strategy
 - e. Tactics

Direct students to this [planning tool](#) for more information.

2. Referring to their summarised Mars One strategic plan, students will then create a detailed editorial print advert to 'tourists' to join the Mars One Foundation on their mission to Mars. Discuss with students the difference between a normal advert and an editorial advert, such as:
 - a. An advertorial is written in a more personal blog style, focusing on facts and information rather than from a promotional point-of-view. The advertorial should make the reader feel confident in what is being sold. Students will need to convince the reader to join the mission to Mars by answering all their questions.
 - b. Inspire action. The editorial is still an advert, although a subtle one. What do you want the reader to do? Encourage them to act because of your advertorial. Engage the reader. An advertorial allows room to include fun facts or images to maintain reader attention.

Plans for Mars

Students will immerse themselves in investigating the red planet, imagining themselves settling there in the future. Thinking about our home planet, students will create a portfolio to persuade or dissuade prospective settlers to Mars.

Subject area:

English

Time required:

2 hours

Resources required:

- **3D glasses template**
- **Cardstock or poster board (11 x 17)**
- **Red and cyan cellophane sheets**
- **Scissors**
- **Glue or tape**
- **Ipad or laptop for student**

Preparation:

Ensure students have access to:

1. [Mars One](#)
2. [Google Expedition](#)
3. [3D Images](#)
4. [3D Video Flyover](#)
5. [Storysphere](#)
6. [NASA Science](#)

Steps:

1. Students will make 3D glasses in preparation for a Mars 3D digital video flyover, following the instruction from [NASA Science](#).
2. Using their 3D glasses, students will explore video and images of Mars on [Google Expedition](#), [3D Images](#) and [3D Video Flyover](#).
3. Encourage students to imagine settling on Mars, reflecting on [Mars One](#) plans to inhabit the planet.
4. Students will create a portfolio designed to persuade or dissuade prospective settlers looking to depart unsustainable Earth. Students need to make sure they incorporate a range of convincing points to either support or refute relocating to Mars.
5. Students may use [Storysphere](#) to share their information in a visually stimulating way. This tool will allow images to be uploaded and audio to be recorded.
6. Students are to present their portfolio to the class.