



NATIONAL ARCHIVES OF AUSTRALIA

# OUT OF THIS WORLD

Australia in  
the space age



# TEACHERS' RESOURCE



# INTRODUCTION

This resource is designed to assist teachers during and after their school visit to *Out of This World: Australia in the space age*. It includes the following documents:

- Facilitation guide
- Activity pack
- The Great Space Race scavenger hunt
- Classroom activities
- Australian Curriculum links.

## EXHIBITION OVERVIEW

*Out of This World: Australia in the space age* explores Australian society's imaginative contribution and response to space research and exploration between the 1950s and 1970s. It features photographs, documents and videos from the National Archives of Australia collection.

## PROGRAM INFORMATION

This Australian Curriculum aligned education program aims to support and enhance the exhibition experience of secondary students from Years 10, 11 and 12 by engaging students with key themes and content. Australian Curriculum links are provided.

A key focus of the program is the development of students' General Capabilities as outlined in the Australian Curriculum: personal and social capabilities, critical and creative thinking, literacy and communication, and ethical and intercultural understanding.

The education program supports a 60-minute visit and works best for class sizes of 30 students or less, divided into groups of 4–5.

It involves completing the Activity pack, facilitated discussion and The Great Space Race scavenger hunt.

You may also choose to complete the classroom activities on your return to school. These activities draw and build on some of the exhibition themes and content.

## BEFORE VISITING THE EXHIBITION

- **PRINT** the Facilitation guide. Bring this document to the exhibition to assist you in facilitating the school visit.
- **PRINT** an Activity pack and scavenger hunt sheet for each group and bring these to the exhibition.
- We recommend bringing a **STOPWATCH/TIMER** (this could also be done on your phone) and a bell/alarm to inform students when it is time to move to the next activity, and when the scavenger hunt has finished.
- Students should bring a **PENCIL** to the exhibition. They may also wish to bring a notepad.

Please provide adequate supervision for your class and check with the host venue for the required teacher/adult to student ratio.

## COVID-19 SAFE PRACTICES

Please consider COVID-19 safe practices when planning and undertaking your visit. Your host venue can also provide further details on how they are working to keep you safe during your visit. You can help by:

- keeping a distance of 1.5 metres with other visitors/staff
- leaving your bags on the bus
- using hand sanitiser
- staying at home if you're sick.

# FACILITATION GUIDE

This **step-by-step guide** will help you facilitate the in-gallery exhibition education program.

The education program should take around **60 minutes** in total. The **structure and timings** are as follows:

- **5 minutes: introduction** and **group formation**
- **30 minutes:** groups complete the **6 activities** in the **Activity pack**
- **10–15 minutes:** students and teacher reconvene to **discuss activity responses**
- **10 minutes: The Great Space Race** scavenger hunt (5 minutes for scavenger hunt, 5 minutes to mark responses)

**1 Distribute the Activity packs** to students.

**2 Read the following** to students:

“*Out of This World: Australia in the space age* explores Australian society’s imaginative response to space research and exploration between the 1950s and 1970s. This Activity pack includes 6 activities to help you explore the exhibition and its content. You’ll be asked to consider and respond to people’s diverse experiences from the past, share your own perspectives on the present, and imagine the future.

Each activity sheet will tell you the activity **THEME** and **LOCATION**.

Look out for the **navigation symbol near object labels**.



This symbol identifies content that is linked to the activity.

In your group, take turns to **READ ALOUD** the information on the activity sheets, then **LOOK** at the related exhibition content. **DISCUSS** the activity question with your group, then work together to **DO** the related task.

Spend around **five minutes** on each activity. I will let you know/ring a bell when you have one minute left on each activity. You’ll have **30 minutes** in total to complete the six activities.

When you have finished, **return to the start** of the exhibition. We will then spend **10 minutes discussing** your answers.

We will then run **The Great Space Race scavenger hunt**, with the winning group receiving a prize!

**3 Divide the class** into groups of **4-5 students** and direct each group to start at a different activity.

**4 Start the activities.** Keep track of time, **informing students** when they have **one minute left** for an activity and when the **five minutes is up**.

**5** You may wish to **circulate** amongst the groups to support discussion and become more familiar with the exhibition content.

- 6 Once students have finished the activities and reconvened at the start of the exhibition, go through each activity and ask a group to **share their response**. Make sure that each group has the opportunity to contribute. Examples are given below.

## ACTIVITY 1

**DISCUSS** Do you see any similarities or differences between the 1940s Woomera protests and contemporary protests linked to First Nations people's rights and freedoms?

### Example answers:

- *Similarity: Access to traditional lands and cultural practices compromised.*
- *Similarity: Difference of priorities in relation to land ownership vs custodianship and connection.*
- *Difference: Although still contentious, legislation (such as the Aboriginal Land Rights Act (Northern Territory) 1976) has been introduced to provide procedures for addressing disputes such as land rights.*

**DO** Imagine you are at a Woomera protest rally in 1947. Divide your group so that you are either a protester advocating for First Nations people's rights, or a member of the Australian Government advocating for national defence. Write down some key points you would like to address. Each group then has 30 seconds to give an inspiring protest speech.

### Example answers:

#### Group 1:

- *Woomera village was built on the traditional lands of the Kokatha people. The firing range extended over the Central Australian Aboriginal Reserves, the traditional lands of the Anangu people.*
- *Woomera Rocket Range impacts on the safety and cultural practices of those living under the line of fire, including access to traditional lands.*
- *The Australian Government is prioritising the nation's defence over the rights of First Nations people.*

#### Group 2:

- *The Australian Government is concerned about the threat of communist espionage during the Cold War.*
- *National defence is a higher priority.*
- *The site is considered ideal due to its isolated outback location.*

## ACTIVITY 2

**DISCUSS** Why do you think the women in this photo were required to wear army clothing?

### Answer:

- *The range was considered a 'morally dangerous place for unattached young women'. It was thought that the army uniforms would make women 'less attractive' to male employees.*

**DO** Imagine that you are a woman living at Woomera in the late 1940s. You might be working as a human 'computer' or in hospitality. You might be a housewife and a young mother, recently relocated from Britain. You have the opportunity to make three demands to the Weapons Research Establishment that would improve women's living or working conditions. Work together to decide and write down your three demands.

### Example answers:

- *Increased employment opportunities and roles for women, including highly skilled positions.*
- *Provision of facilities for women.*
- *Improved pay.*

Do the demands have any continued relevance with the workplace challenges women may face today?

### Example answer:

- *Whilst there have in many instances been improvements to employment rights affecting women, it may be argued that many or all of these demands have continued relevance.*

### ACTIVITY 3

**DISCUSS** What role did media linked to the Moon landing play in capturing the imagination of Australians such as Jenny Pettigrove?

**Example answers:**

- *Television provided a new platform to support and inspire creative content, such as The Stranger and Mr Squiggle, whilst allowing people to 'see' real events unfold on the news or current affairs programs. Many people bought televisions specifically to watch the Moon landing.*
- *Media capitalised on the interest of the public, responding with diverse news stories, colour-printed articles, and space-inspired advertisements.*
- *Media expanded people's knowledge of the world and sparked curiosity about world events.*

**DO** Imagine that today's media and technology existed at the time of the Moon landing, providing us with information ranging from live data through to the daily activities of astronauts in space. Together, choose a social media platform – for example TikTok, Twitter or Instagram – and re-enact, write or draw your social media post related to the Moon landing.

**Example answers:**

- *TikTok renditions of the Moon landing made by the public.*
- *Astronaut tweets responding to questions from the public.*
- *Astronauts Instagramming photos of their meals.*

### ACTIVITY 4

**DISCUSS** What personal characteristics do you think are required to deliver a successful citizen science project?

**Example answers:**

- *Creativity, innovation, imagination, drive, determination, intelligence.*

**DO** Imagine that you are taking part in your own citizen science project. What would you like to find out? Write down your example (you may include more than one).

**Example answers:**

- *Tracking sightings of a particular bird or animal.*
- *Monitoring cloud formations.*
- *Insect egg tracking.*

### ACTIVITY 5

**DISCUSS** How do you think Australian people in 1970 felt about our country's relationship with the United States?

**Example answers:**

- *Many may have felt conflicted or opposed, others may have felt supportive and encouraged.*
- *Australia's involvement with NASA might be perceived by many as a positive international collaboration in the post-WWII years and during the Cold War.*
- *Many Australians were against Australia's involvement in the Vietnam War and did not support the country's alliance with the US.*

**DO** Imagine you are one of the children at the moon rock presentation, whose parent was involved in tracking the Apollo 11 mission. Write a sentence that describes how it feels to see the moon rocks.

**Example answers:**

- *Proud, in awe, impressed, other, in relation to country, political relationships, family member, human ambition or achievement, seeing material from another planet, the fact that the rocks were collected by Apollo 11 astronauts.*

**DO** imagine you are an anti-Vietnam War protester. Write a sentence that describes why you are attending the protest and how it makes you feel.

### Example answers:

- *Australian or US Government involvement in the Vietnam War, conscription, the legitimacy of the war, risks to Australian citizens and others, the human toll of the war, other, creating feelings of empowerment, disappointment, anger, upset, worry.*

## ACTIVITY 6

**DISCUSS** Why do you think Australian designers and creators during the 1950s and 1960s were so inspired by space exploration?

### Example answers:

- *Interest in the 'unknown', including extra-terrestrial life, planets and places.*
- *Dreams of an imagined future.*
- *Introduction of the television allowed for new forms of expression.*

**DO** Many space-inspired designs of the 1950s and 1960s featured an imagined future. Draw your own space-inspired design that considers how we might live, travel or communicate in the future.

### Example answers:

- *Housing that enables people to live on other planets.*
- *Space ships or rockets as public transport.*
- *A teleportation device.*

**7** Hand out **The Great Space Race scavenger hunt** and read the following:

**6** It's now time for The Great Space Race scavenger hunt! **Work with your group** to correctly answer as many clues as possible, addressing the clues in any order you wish. The answers can be found around the exhibition.

You have **five minutes** to complete the scavenger hunt, or as much time as it takes for the first team to finish. I will let you know when your time is up. We will then **meet back at the start** of the exhibition to mark the answers.

The group with the **most correct answers** wins and will receive a prize.

Please be respectful of other visitors and do not run in the gallery. Your time starts ... now! **9**

**8** Let students know when the **five minutes is up** or if the **first group has returned** – whichever happens first. You may wish to use a **bell or alarm** to indicate that time is up.

**9** Ask groups to **swap** sheets with another group and **mark** each other's answers. The group with the most correct answers wins (answers on next page).

**10** The **winners' prizes** can be collected from host venue staff at the end of your visit.

### Answers to The Great Space Race:

1. How much moon rock was collected during the Apollo 11 Moon landing? *(22 kg)*
2. Which puppet, who starred in his own television series, is known as 'the man from the Moon'? *(Mr Squiggle)*
3. What general item can you purchase at the Woomera Store? *Hint: It is written on the store wall. (Biscuits)*
4. Which Australian Prime Minister wrote a message that was sent to the Moon with the Apollo 11 mission in 1969? *(Prime Minister John Gorton)*
5. WRESAT was Australia's first satellite. What was the launch vehicle for the satellite? *(US Redstone rocket)*
6. What was 'Operation Moonwatch'? *Hint: Even the public can participate. (A citizen scientist satellite-tracking project involving amateur astronomers)*
7. What is the name of the project that had the first crewed spaceflight program? *Hint: Look for the astronaut in the pressure suit. (Project Mercury)*
8. What is the name of the main character in Australia's first science-fiction television series, *The Stranger*, released in 1964? *(Adam Suisse)*
9. In 1969, where would I go to see an Australian space-age-inspired fashion show? *Hint: It was a charity event to celebrate the Moon landing. ('Angels in Orbit' fashion parade, Sydney)*
10. Where is Woomera located? *(about 450 kilometres north-west of Adelaide)*

We hope you had fun!

On your return to school you may wish to complete the classroom activities.

## AFTER VISITING THE EXHIBITION

We would love to know your thoughts about the program. After completing the program please scan the QR code to take a short survey.







NATIONAL ARCHIVES OF AUSTRALIA

# OUT OF THIS WORLD

Australia in  
the space age



# ACTIVITY PACK

# OUT OF THIS WORLD

## Australia in the space age

# ACTIVITY PACK

*Out of This World: Australia in the space age* explores Australian society's imaginative response to space research and exploration between the 1950s and 1970s. This Activity pack includes 6 activities to help you explore the exhibition and its content. You'll be asked to consider and respond to people's diverse experiences from the past, share your own perspectives on the present and imagine the future.

## INSTRUCTIONS

- The activity sheets will tell you the activity **THEME** and **LOCATION**.
- Look out for the navigation symbol near object labels. This symbol identifies exhibition content that is linked to the activity.
- In your group, take turns to **READ ALOUD** the information on the activity sheet, then **LOOK** at the related exhibition content.
- **DISCUSS** the activity question with your group, then turn the page over and **DO** the related task together.
- Spend around **5 minutes** on each activity – your teacher will inform you when it is time to move to the next activity. You'll have **30 minutes** in total to complete the 6 activities.
- When you have finished, **return to the start** of the exhibition to discuss the activities.



# ACTIVITY 1

## FIRING ACROSS COUNTRY



### THEME

Woomera

### LOCATION

Go to the **Firing across country** story and look for the navigation symbol.



### READ ALOUD

From the 1950s to 1970s Woomera was the centre of Australia's space research. However, it was initially established as a defence missile testing site in 1947. Woomera village was built on the traditional lands of the Kokatha people and the firing range extended over the Central Australian Aboriginal Reserves, the traditional lands of the Anangu people. *The Rocket Range, Aborigines and War* features a speech by Dr Charles Duguid, who played a lead role in protests against the establishment of the Woomera Rocket Range. Duguid expressed concerns over the cultural impact on and safety of First Nations custodians.

Despite protests, the Australian Government went ahead with the rocket range. Woomera was considered an ideal location owing to its isolation, and national defence was prioritised due to the potential threat of communism during the Cold War period. *Hands Off the Nation's Defences* detailed these priorities and warned Australians not to be misled by communist propaganda that opposed the range.

### LOOK

Take a look at *The Rocket Range, Aborigines and War* and the *Hands off the Nation's Defences* booklets.

### DISCUSS

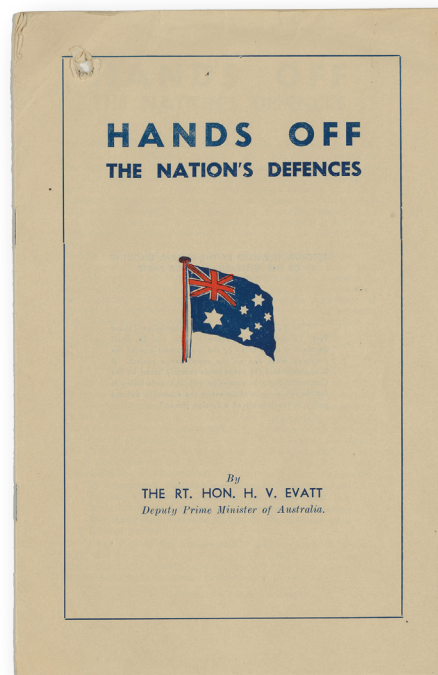
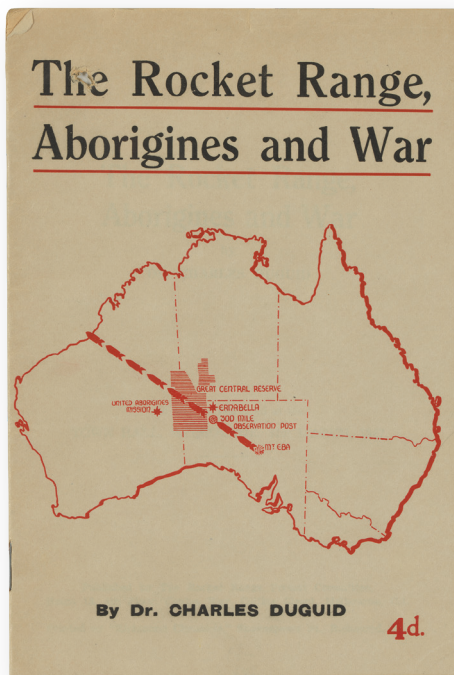
Do you see any similarities between the 1940s Woomera protests and contemporary protests linked to First Nations peoples' rights and freedoms?

*Turn the page over.*

Booklet, *The Rocket Range, Aborigines and War*, 1947.  
NAA: D1918, S1493

Booklet, *Hands Off the Nation's Defences*, 1947.  
NAA: D1918, S1493

# ACTIVITY 1 FIRING ACROSS COUNTRY



## DO

Imagine you are at a Woomera protest rally in 1947. Divide your group so that you are either a protester advocating for First Nations peoples' rights or a member of the Australian Government advocating for national defence. Write down some key points you would like to address. Each group then has 30 seconds to give an inspiring protest speech.

# ACTIVITY 2

## WOMEN OF WOOMERA



### THEME

*Woomera*

### LOCATION

Go to the **Women of Woomera** story and look for the navigation symbol.



### READ ALOUD

Woomera was considered a 'morally dangerous place for unattached young women', and up until the 1960s the majority of female residents were housewives with young children, many having relocated from Britain. Social attitudes at the time meant that many married women did not work. Most female job opportunities at Woomera were in health, hospitality and office administration; however, some were employed as human 'computers', processing data and developing mathematical formulae. No dedicated facilities were provided for women on-site until the mid 1950s.

### LOOK

Take a look at the image of the four female computers at Woomera.

### DISCUSS

Why do you think the women in this photo were required to wear army clothing?

*Turn the page over.*

Four female computers at Woomera, 1949.  
NAA: D874, NB211

## ACTIVITY 2 WOMEN OF WOOMERA



### DO

Imagine that you are a woman living at Woomera in the late 1940s. You might be working as a human ‘computer’ or in hospitality. You might be a housewife and a young mother, recently relocated from Britain. You have the opportunity to make three demands to the Weapons Research Establishment that would improve women’s living or working conditions. Work together to decide and write down your three demands.

Do your demands have any relevance to the experiences of women today?

# ACTIVITY 3

## DESTINATION MOON

### THEME

*Childhood inspiration*

### LOCATION

Go to the **Destination Moon** story and look for the navigation symbol.



### READ ALOUD

Jenny Pettigrove was 10 years old at the time of the Moon landing and was fascinated by news of space exploration. Her scrapbook is filled with newspaper articles documenting the Apollo missions. Some pages are in colour, which was unusual for this time due to printing costs. Newspapers were a key source of information for Jenny until her family purchased a television in 1969.

### LOOK

Look at the digital images from 10-year-old Jenny Pettigrove's scrapbook.

### DISCUSS

What role did media linked to the Moon landing play in capturing the imagination of Australians such as Jenny Pettigrove?

*Turn the page over.*

Newspaper clippings from Jenny Pettigrove's scrapbook, 1969–70.  
Courtesy Jenny Pettigrove

# ACTIVITY 3 DESTINATION MOON



## DO

Imagine that today's media and technology existed at the time of the Moon landing, providing us with information ranging from live data through to the daily activities of astronauts in space. Together, choose a social media platform – for example, YouTube, Twitter, TikTok, Instagram, BeReal etc – and perform, write or draw a social media post that documents an aspect of the Moon landing that you find especially interesting.

# ACTIVITY 4

## AUSTRALIS OSCAR 5



### THEME

*Citizen scientists*

### LOCATION

Go to the **Australis OSCAR 5** story and look for the navigation symbol.



### READ ALOUD

The Australis OSCAR 5 amateur radio satellite was designed and built in 1966 by undergraduate students at the University of Melbourne. It was launched by NASA in 1970, making it the second Australian satellite to go into orbit. The satellite was built with limited funds using household items such as bed springs and measuring tapes. It continues to orbit the Earth today and can be tracked online.

This citizen scientist project is an example of how students can work with professionals to contribute to scientific projects.

### LOOK

Take a look at the photograph of Richard Tonkin with a mock-up of the Australis OSCAR 5.

### DISCUSS

What personal characteristics do you think are required to deliver a successful citizen science project?

*Turn the page over.*

Richard Tonkin with a mock-up of the Australis OSCAR 5, 1966.  
NAA: A1200, L54721

## ACTIVITY 4 AUSTRALIS OSCAR 5



### DO

Imagine that you are taking part in your own citizen science project. What would you like to find out? Write down or draw your example (you may include more than one).

# ACTIVITY 5

## PRESIDENTIAL GIFTS



### THEME

*Moon landing*

### LOCATION

Go to the **Presidential gifts** story and look for the navigation symbol.



### READ ALOUD

The 1960s marked an exciting time for space exploration and international collaborations, including Australia's involvement in NASA's Apollo missions. After the success of the Moon landing during the Apollo 11 mission in 1969, United States President Richard Nixon gave gifts of moon rock fragments to 135 'friendly' countries. In 1970 US Vice President Spiro Agnew presented the moon rocks to Australia during a ceremony at Parliament House.

The year 1970 also saw an increase in protests against Australia's involvement in the Vietnam War. The Australian Government began sending service personnel to Vietnam in 1962, in support of the US – its key ally – and to stop the spread of communism. The anti-Vietnam War image shown here is not in the exhibition. It was taken outside Parliament House at the same time as the moon rock presentation.

### LOOK

Take a look at the image of children viewing moon rock fragments during the 1970 presentation ceremony. Also consider the image shown above of an anti-Vietnam War protest.

### DISCUSS

How do you think Australian people in 1970 felt about our country's relationship with the US?

*Turn the page over.*

Anti-Vietnam War protest, Parliament House, Canberra, 1970.

NAA: A1200, L85635

Children viewing moon rock fragments, Parliament House, Canberra, 1970.

NAA: A1200, L85621

## ACTIVITY 5 PRESIDENTIAL GIFTS



### DO

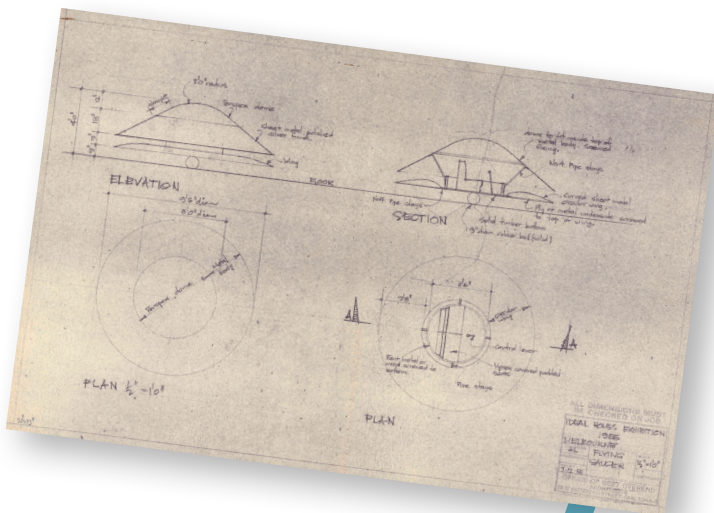
Imagine you are one of the children at the moon rock presentation, whose parent was involved in tracking the Apollo 11 mission. Write a sentence that describes how it feels to see the moon rocks.



Now imagine you are an anti-Vietnam War protester. Write a sentence that describes why you are attending the protest and how it makes you feel.

# ACTIVITY 6

## FUTURISTIC ARCHITECTURE



### THEME

Pop culture

### LOCATION

Go to the [Futuristic architecture](#) story and look for the navigation symbol.



### READ ALOUD

The 1950s and 1960s marked a period of space-inspired design that considered imagined futures, planets and extraterrestrial life. Designers and architects combined space-age design elements with natural forms and organic shapes, and advances in technology influenced the use of materials. In 1956 Melbourne architect Acheson Best Overend designed a 'House of the Future', featuring a plastic roof supported by a central core, flat-screen televisions and remote-control technology, and a garage for the occupant's 'flying saucer'. He anticipated that road congestion would make cars obsolete in the future.

### LOOK

Take a look at architect Acheson Best Overend's 'flying saucer' design.

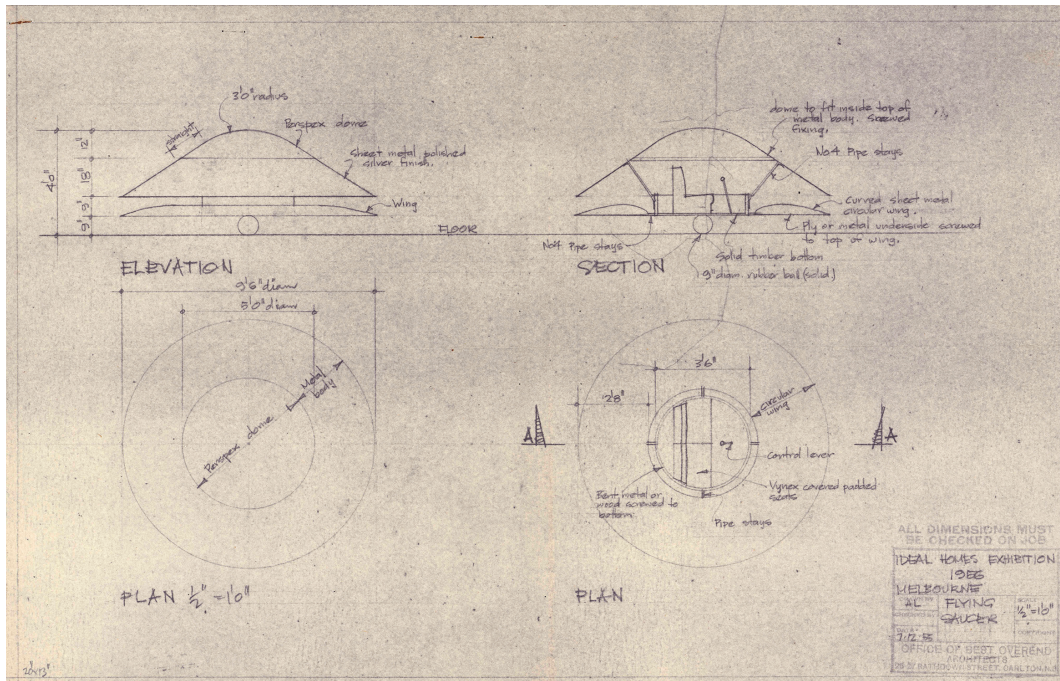
### DISCUSS

Why do you think Australian designers and creators during the 1950s and 1960s were so inspired by space exploration?

*Turn the page over.*

'Flying saucer' design by architect  
Acheson Best Overend, 1956.  
NAA: A1336, 56130

## ACTIVITY 6 FUTURISTIC ARCHITECTURE



DO

Many space-inspired designs of the 1950s and 1960s featured an imagined future. Draw your own space-inspired design that considers how we might live, travel or communicate in the future.

# OUT OF THIS WORLD

## Australia in the space age

# THE GREAT SPACE RACE

Complete The Great Space Race scavenger hunt in your groups. Correctly answer as many clues as possible, addressing the clues in any order you wish. The answers can be found around the exhibition.

You have 5 minutes to complete the scavenger hunt, or as much time as it takes for the first team to finish. The group with the most correct answers wins and will receive a prize!

- 1 How much moon rock was collected during the Apollo 11 Moon landing?
- 2 Which puppet, who starred in his own television series, is known as 'the man from the Moon'?
- 3 What general item can you purchase at the Woomera Store? *Hint: It is written on the store wall.*
- 4 Which Australian Prime Minister wrote a message that was sent to the Moon with the Apollo 11 mission in 1969?

- 5 WRESAT was Australia's first satellite. What was the launch vehicle for the satellite?
- 6 What was 'Operation Moonwatch'? *Hint: Even the public can participate.*
- 7 What is the name of the project that had the first crewed spaceflight program? *Hint: Look for the astronaut in the pressure suit.*
- 8 What is the name of the main character in Australia's first science-fiction television series, *The Stranger*, released in 1964?
- 9 In 1969, where would I go to see an Australian space-age-inspired fashion show? *Hint: It was a charity event to celebrate the Moon landing.*
- 10 Where is Woomera located?



# CLASSROOM ACTIVITIES

We hope you enjoyed your visit to the *Out of This World: Australia in the space age* exhibition.

The following activities draw and build on some of the themes encountered during the exhibition experience and can be completed back in the classroom.

## CLASSROOM ACTIVITY 1 MEDIA AND THE MOON

The exhibition displays digital images of pages from 10-year-old Jenny Pettigrove's scrapbook. Her scrapbook contained cut-out newspaper articles documenting the Apollo missions.

Research a contemporary issue relating to space and the moon – for example, space law, asteroid defence, or increased resource exploitation.

Jenny used a scrapbook to keep a record of her research. How might you communicate what you have discovered to a modern audience? Use digital tools of your choice to document what you have discovered about your selected modern space issue.

## CLASSROOM ACTIVITY 2 WOMEN IN SPACE

Currently, the United States NASA Artemis mission has a goal of landing the first female astronaut and the next man on the Moon by 2024. Imagine that this mission has just been successfully completed. Perform or film a news report of an interview with the astronauts. You may wish to include additional roles.

The activity may be undertaken as a class, with many roles, or in smaller groups with fewer roles. Let the group decide who will be the:

- journalist
- female and male astronaut
- cameraperson (if filming)
- additional roles, created as necessary.

Research, discuss and prepare the questions and responses in advance. You may wish to consider:

- the significance of achieving the first Moon landing in 55 years
- the significance of the first female astronaut landing on the Moon
- the contribution of women to the first Moon landing in 1969
- challenges and opportunities for women working in science and how this has changed over time.

What would you like to ask? What might the answers be?

## CLASSROOM ACTIVITY 3

### CITIZEN SCIENCE

One of the benefits of citizen science projects is that they have a wide reach and can help professional scientists by involving more people on the ground to collect and contribute data. Here's your chance to contribute to real scientific research and make a difference to the world.

Go to the Australian Citizen Science Association website: [citizenscience.org.au/ala-project-finder](http://citizenscience.org.au/ala-project-finder). Take a look at their Project Finder to learn more about current citizen science projects in Australia and look for opportunities to volunteer or get involved.

Decide on a project to become involved in, either individually or as a class.

## CLASSROOM ACTIVITY 4

### RIGHTS AND FREEDOMS

Cast your minds back to the exhibition and consider the display that discusses the history of Woomera.

From the 1950s to 1970s Woomera was the centre of Australia's space research. However, it was initially established as a defence missile testing site in 1947. Woomera village was built on the traditional lands of the Kokatha people. The firing range extended over the Central Australian Aboriginal Reserves, the traditional lands of the Anangu people. The exhibition displays the booklet *The Rocket Range, Aborigines and War*, which features a speech by Dr Charles Duguid, an Aboriginal rights activist. Dr Duguid played a lead role in protests against the establishment of the Woomera Rocket Range, raising concerns over cultural impact and safety for First Nations custodians.

Also on display is *Hands Off the Nation's Defences*, written in 1947 by Deputy Prime Minister of Australia Herbert V Evatt. This booklet details the Australian Government's priority at the time towards national defence and reflects concerns regarding the perceived threat of communism during the Cold War.

Use the National Archives of Australia's online RecordSearch to take a closer look at the contents of these documents, along with other documents linked to Woomera Rocket Range protests.

[bit.ly/3sRCCGI](http://bit.ly/3sRCCGI)

Booklet, *The Rocket Range, Aborigines and War*, 1947.  
NAA: D1918, S1493

Booklet, *Hands Off the Nation's Defences*, 1947.  
NAA: D1918, S1493



### DISCUSS

- How were the rights and freedoms of First Nations people affected by the establishment of the Woomera Rocket Range and village?
- Why was the Australian Government prioritising weapons development and how did this relate to the Cold War?
- What kinds of similarities or differences can you see between the 1940s Woomera protests and contemporary protests linked to First Nations peoples' rights and freedoms? These may reflect progress, change or continued challenges.

# AUSTRALIAN CURRICULUM LINKS

Activity	Year	Subject	Curriculum Link
<b>ACTIVITY PACK</b>			
<b>ACTIVITY 1</b> <b>Firing across country</b> Considers the rights and freedoms of Australia's First Nations people, from Woomera in the 1940s through to present day.	10	History	<ul style="list-style-type: none"> <li>The causes of First Nations Australians' campaigns for rights and freedoms before 1965, such as discriminatory legislation and policies, the 1938 Day of Mourning and the Stolen Generations (AC9HH10K09)</li> <li>The continuing efforts to create change in the civil rights and freedoms in Australia, for First Nations Australians, migrants and women (AC9HH10K13)</li> <li>Different historical interpretations and debates during the second half of the 20th century (AC9HH10K20)</li> <li>Changing historical perspectives over time in relation to the developments in technology, public health, longevity, standard of living in the 20th century, and concern for the environment and sustainability (AC9HH10K14)</li> <li>Causes and effects of the significant events and developments of the major global influences on Australia in the post-World War II period (AC9HH10K16)</li> <li>Continuities and changes in perspectives, responses, beliefs and values that have influenced the Australian way of life (AC9HH10K18)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>The nature of the relationship of Indigenous peoples with their land (ACHMH070)</li> <li>The nature of government policies and their impact on Indigenous peoples (ACHMH072)</li> <li>The role of individuals and groups who supported the movement for Indigenous recognition and rights, including the methods used and the resistance encountered (ACHMH073)</li> </ul>
	10, 11, 12	Cross-curriculum	<ul style="list-style-type: none"> <li>ATSI History &amp; Culture, and Sustainability</li> </ul>

Activity	Year	Subject	Curriculum Link
<b>ACTIVITY 2</b> <b>Women of Woomera</b> Reflects on the roles and experiences of women working at Woomera, extending to the experiences of women in the workforce today.	10	History	<ul style="list-style-type: none"> <li>The effects of World War II, with particular emphasis on the continuities and changes on the Australian home front, such as the changing roles of women and First Nations Australians, and the use of wartime government controls (AC9HH10K04)</li> <li>The significance of World War II to Australia's immediate post-war economic, political and social development, and Australia's international relationships in the 20th century (AC9HH10K05)</li> <li>The effects of significant post-World War II world events, ideas and developments on Australian society (AC9HH10K07)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>The significance of World Wars I and II for women (ACHMH064)</li> <li>Post-war changes in social conditions affecting women, for example improved pay and employment opportunities (ACHMH067)</li> <li>The achievements and legacies of women's movements (ACHMH069)</li> </ul>
<b>ACTIVITY 3</b> <b>Destination Moon</b> Considers the nature of media as a tool for both documenting and inspiring, with a particular focus on Australia at the time of the Moon landing.	10	History	<ul style="list-style-type: none"> <li>The effects of global influences on Australia's changing identity as a nation and its international relationships (AC9HH10K19)</li> <li>Changing social, political, economic, cultural, environmental and technological conditions, and the causes of a major global influence in Australia (AC9HH10K17)</li> <li>Causes and effects of the significant events and developments of the major global influences on Australia in the post-World War II period (AC9HH10K16)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>The nature of economic and social changes in Australia up to the 1970s and the impact and significance of these changes for individuals and groups within each society and for relations with other countries (ACHMH204)</li> </ul>

Activity	Year	Subject	Curriculum Link
<b>ACTIVITY 4</b> <b>Australis OSCAR 5</b> Explores the Australis OSCAR 5 project and the role of citizen scientists in contributing to Australian scientific research and development.	10	Science	<ul style="list-style-type: none"> <li>Investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering (AC9S10H02)</li> <li>Assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty (AC9S10I06)</li> <li>Examine how the values and needs of society influence the focus of scientific research (AC9S10H04)</li> </ul>
		Civics & Citizenship	<ul style="list-style-type: none"> <li>The challenges to and ways of sustaining a resilient democracy and a cohesive society in Australia and/or in our region or globally (AC9HC10K05)</li> </ul>
	11, 12	Science	<ul style="list-style-type: none"> <li>ICT and other technologies have dramatically increased the size, accuracy and geographic and temporal scope of data sets with which scientists work (ACSES064)</li> <li>The acceptance of scientific knowledge can be influenced by the social, economic and cultural context in which it is considered (ACSES066)</li> </ul>
<b>ACTIVITY 5</b> <b>Presidential gifts</b> Examines Australia's relationship with the US during the Cold War period. Considers the political significance of the Moon landing, and responses towards Australia's involvement in the Vietnam War.	10	History	<ul style="list-style-type: none"> <li>Changing social, political, economic, cultural, environmental and technological conditions, and the causes of a major global influence in Australia (AC9HH10K17)</li> <li>Causes and effects of the significant events and developments of the major global influences on Australia in the post-World War II period (AC9HH10K16)</li> </ul>
		Science	<ul style="list-style-type: none"> <li>Examine how the values and needs of society influence the focus of scientific research (AC9S10H04)</li> </ul>
		Civics & Citizenship	<ul style="list-style-type: none"> <li>The challenges to and ways of sustaining a resilient democracy and a cohesive society in Australia and/or in our region or globally (AC9HC10K05)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>The evolving nature and character of the Cold War in Europe and the Asia-Pacific from 1948 through to détente (ACHMH188)</li> <li>The development of post-war peace movements, with particular reference to their objectives, methods and influence, and the use of non-violence (ACHMH224)</li> </ul>

Activity	Year	Subject	Curriculum Link
<b>ACTIVITY 6</b> <b>Futuristic architecture</b> Looks at the influence of space exploration on Australian design and architecture, including the notion of 'imagined futures'.	10	History	<ul style="list-style-type: none"> <li>• Changing social, political, economic, cultural, environmental and technological conditions, and the causes of a major global influence in Australia (AC9HH10K17)</li> <li>• The effects of global influences on Australia's changing identity as a nation and its international relationships (AC9HH10K19)</li> <li>• Changing social, political, economic, cultural, environmental and technological conditions, and the causes of a major global influence in Australia (AC9HH10K17)</li> <li>• Changing social, political, economic, cultural, environmental and technological conditions, and the causes of a major global influence in Australia (AC9HH10K17)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>• The nature of economic and social changes in Australia and one other country up to the 1970s and the impact and significance of these changes for individuals and groups within each society and for relations with other countries (ACHMH204)</li> </ul>

Activity	Year	Subject	Curriculum Link
<b>CLASSROOM ACTIVITIES</b>			
<b>ACTIVITY 1</b> <b>Media and the Moon</b> Inspired by Jenny Pettigrove, students create their own scrapbook using contemporary media and technology tools to document the Moon landing.	10	History	<ul style="list-style-type: none"> <li>The effects of global influences on Australia's changing identity as a nation and its international relationships (AC9HH10K19)</li> <li>Changing social, political, economic, cultural, environmental and technological conditions, and the causes of a major global influence in Australia (AC9HH10K17)</li> <li>Causes and effects of the significant events and developments of the major global influences on Australia in the post-World War II period (AC9HH10K16)</li> </ul>
		Media Arts	<ul style="list-style-type: none"> <li>Experiment with ways to construct representations that reflect ideas, perspectives and/or meaning, and/or use of media conventions, media languages and media technologies (AC9AMA10D01)</li> <li>Investigate the ways that media artists use media arts concepts to construct representations in media arts works and practices across cultures, times, places and/or other contexts (AC9AMA10E01)</li> <li>Apply production processes and use media arts concepts to construct representations and produce media arts works that communicate ideas, perspectives and/or meaning, and confirm or challenge the expectations of specific audiences (AC9AMA10C02)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>The nature of economic and social changes in Australia up to the 1970s and the impact and significance of these changes for individuals and groups within each society and for relations with other countries (ACHMH204)</li> </ul>

Activity	Year	Subject	Curriculum Link
<b>ACTIVITY 2</b> <b>Women in space</b> Students imagine that NASA's Artemis mission, with the goal of landing the first woman and the next man on the Moon, has been achieved. Together, they create a news report featuring an interview with the astronauts.	10	History	<ul style="list-style-type: none"> <li>The effects of World War II, with particular emphasis on the continuities and changes on the Australian home front, such as the changing roles of women and First Nations Australians, and the use of wartime government controls (AC9HH10K04)</li> <li>The significance of World War II to Australia's immediate post-war economic, political and social development, and Australia's international relationships in the 20th century (AC9HH10K05)</li> <li>The effects of significant post-World War II world events, ideas and developments on Australian society (AC9HH10K07)</li> </ul>
		Media Arts	<ul style="list-style-type: none"> <li>Experiment with ways to construct representations that reflect ideas, perspectives and/or meaning, and/or use of media conventions, media languages and media technologies (AC9AMA10D01)</li> <li>Investigate the ways that media artists use media arts concepts to construct representations in media arts works and practices across cultures, times, places and/or other contexts (AC9AMA10E01)</li> <li>Apply production processes and use media arts concepts to construct representations and produce media arts works that communicate ideas, perspectives and/or meaning, and confirm or challenge the expectations of specific audiences (AC9AMA10C02)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>The significance of World Wars I and II for women (ACHMH064)</li> <li>The post-war economic and technological improvements that changed women's lives, for example new technologies in the home, the rise of consumerism and social networking (ACHMH066)</li> <li>The achievements and legacies of women's movements (ACHMH069)</li> </ul>

Activity	Year	Subject	Curriculum Link
<b>ACTIVITY 3</b> <b>Citizen science</b> Students consider the role of citizen scientists. They explore current Australian citizen science projects and look for opportunities to volunteer or get involved.	10	Science	<ul style="list-style-type: none"> <li>Investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering (AC9S10H02)</li> <li>Assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty (AC9S10I06)</li> <li>Examine how the values and needs of society influence the focus of scientific research (AC9S10H04)</li> </ul>
		Civics & Citizenship	<ul style="list-style-type: none"> <li>The challenges to and ways of sustaining a resilient democracy and a cohesive society in Australia and/or in our region or globally (AC9HC10K05)</li> </ul>
	11, 12	Science	<ul style="list-style-type: none"> <li>ICT and other technologies have dramatically increased the size, accuracy and geographic and temporal scope of data sets with which scientists work (ACSES064)</li> <li>The acceptance of scientific knowledge can be influenced by the social, economic and cultural context in which it is considered (ACSES066)</li> </ul>

Activity	Year	Subject	Curriculum Link
<b>ACTIVITY 4</b> <b>Rights and freedoms</b> Students use the NAA online RecordSearch to review exhibition content related to protests at Woomera, with a particular focus on the rights and freedoms of First Nations people and the role of protest, along with the influence of the Cold War.	10	History	<ul style="list-style-type: none"> <li>The causes of First Nations Australians' campaigns for rights and freedoms before 1965, such as discriminatory legislation and policies, the 1938 Day of Mourning and the Stolen Generations (AC9HH10K09)</li> <li>The continuing efforts to create change in the civil rights and freedoms in Australia, for First Nations Australians, migrants and women (AC9HH10K13)</li> <li>Different historical interpretations and debates during the second half of the 20th century (AC9HH10K20)</li> <li>Changing historical perspectives over time in relation to the developments in technology, public health, longevity, standard of living in the 20th century, and concern for the environment and sustainability (AC9HH10K14)</li> <li>Causes and effects of the significant events and developments of the major global influences on Australia in the post-World War II period (AC9HH10K16)</li> <li>Continuities and changes in perspectives, responses, beliefs and values that have influenced the Australian way of life (AC9HH10K18)</li> <li>Causes and effects of the significant events and developments of the major global influences on Australia in the post-World War II period (AC9HH10K16)</li> </ul>
	11, 12	Modern History	<ul style="list-style-type: none"> <li>The nature of the relationship of Indigenous peoples with their land (ACHMH070)</li> <li>The nature of government policies and their impact on Indigenous peoples (ACHMH072)</li> <li>The role of individuals and groups who supported the movement for Indigenous recognition and rights, including the methods used and the resistance encountered (ACHMH073)</li> <li>The evolving nature and character of the Cold War in Europe and the Asia-Pacific from 1948 through to détente (ACHMH188)</li> <li>The development of post-war peace movements, with particular reference to their objectives, methods and influence, and the use of non-violence (ACHMH224)</li> </ul>
	10, 11, 12	Cross-curriculum	<ul style="list-style-type: none"> <li>ATSI History &amp; Culture, and Sustainability</li> </ul>