



## STAGE 3 PRESENTATION OUTLINE

Each presentation lasts for approx 40 - 60 minutes and includes 2 or 3 sections. Presentations can be customised to your student's level of learning.

### SECTION 1. PRESENTER-LED TALK.

We go on an interactive journey looking at our Planet, Solar System and Galaxy. Topics from;

- The Earth and its place in the Solar System
- The Sun.
- The relationship between the Earth, Moon, Sun & Planets.
- Planets and their relative sizes.
- Movement of the Earth and the Sun.
- Planet orbit times, speed & distance.
- Key features of Planets of our Solar System.

We also look at our place in Space, how big our Galaxy is, the Universe and our place within it.

Alternative option:

- Our view of the universe has changed over time. We talk about how people from different cultures (Ptolemy, Aryabhata, Copernicus, Galileo) have contributed to advancing scientific understanding of the solar system and how our view of the universe changes as technology improves.

#### **\*Covers Stage 3 syllabus content.**

Earth's place in the solar system.

How does the Earth compare to other planets in the solar system?

Regular events in the Solar System.

\*Other elements of the Stage 3 syllabus are covered in our 360° movies.

## SECTION 2 - 360° SURROUND MOVIE

We have several choices here. Choose your own or let us help you decide.

**'Moonbase One'** - <https://www.planetarium.com.au/moonbase-one>

The Moon has always captivated humanity, inspiring us to leave the world behind and venture into space. Come along on an amazing adventure as we strive to understand our magnificent neighbour, The Moon. Taking place across the night of a full moon, we join a Virtual Reality games developer as she struggles to work out what is wrong with her new game.

The show features stunning visualisations of the Moon's violent formation, captures the achievements of lunar exploration and demystifies natural phenomena such as eclipses and the changing phases of the Moon.

**'MARS 1001'** - <https://www.planetarium.com.au/mars-1001>

The first men and women to travel to Mars are alive and amongst us today.

MARS One Thousand One is a stunning film that brings home the reality of manned Mars exploration, the greatest engineering feat ever to be attempted. The film is set just far enough into the future to seem real, yet with science-fictional touches to indicate it's still a little way off.

Experience the story we all hope to witness in our lifetimes: the first journey to the Red Planet.

**'Stories In The Stars'** - <https://www.planetarium.com.au/stories-in-the-stars>

European night sky stories are familiar to many people. However, the stories indigenous to the southern skies are less well known. Although different Australian Aboriginal groups have different astronomical traditions, there are some broad similarities. Explore Indigenous Australian astronomy, and find out how indigenous culture describes constellations that cannot be seen from northern latitudes.

Even constellations that can be seen from Europe appear in a different way in the sky in the southern hemisphere.

**'Sizing Up Space'** - <https://www.planetarium.com.au/sizing-up-space>

How big is the distance between the Earth and the Sun - or between the Sun and the other planets?

Discover the Light Year, the very large 'ruler' that scientists use to measure the size of Space.

Be amazed by the ever-increasing distances to the nearest stars, to the edge of the Milky Way and to the farthest galaxies in the Universe.

**'Astronaut'** - <https://www.planetarium.com.au/astronaut>

The exploration of space is the greatest endeavour that humankind has ever undertaken. What does it take to be part of this incredible journey? What does it take to become an astronaut?

Experience a rocket launch from inside the body of an astronaut. Explore the amazing worlds of inner and outer space, from floating around the International Space Station to manoeuvring through microscopic regions of the human body.

Discover the perils that lurk in space as we subject Chad, our test astronaut, to everything that space has to throw at him.

**'We Are Aliens'** - <https://www.planetarium.com.au/we-are-aliens>

As a species, we have always looked to the sky and asked 'Are we alone'?  
 How do we know which planets could harbour life? What are the requirements for life?  
 Finding the right conditions to support life is a delicate balance, and scientists are on the lookout for exoplanets in the 'Goldilocks Zone' – Not too hot, and not too cold!  
 Join scientists in the hunt for real aliens.

**'We Are Guardians'** - <https://www.planetarium.com.au/we-are-guardians>

From the smallest bacteria to the largest ocean whale; there exists a link between all things.  
 In a world out of balance, We Are Guardians looks at how ecosystems are intrinsically connected and with the increasing use of Satellite Monitoring, examines the links between human activities, climate change, and sustainability.

**'Minecraft: Worlds Of Curiosity'** <https://www.planetarium.com.au/worlds-of-curiosity>

Be curious! Based on the game Minecraft, explore the scientific consequences of alternative versions of Earth via "what if" questions.  
 'What would it be like to live on an Earth with no Moon?' 'What if Earth was tilted on its side (like Uranus)?'

These 8 movies are our most popular for Stage 3 however we also have a further selection of movies that may be suitable for your students depending on the topic and level of learning.

Find out more <https://www.planetarium.com.au/now-showing>

### SECTION 3. 360° SURROUND PRESENTER-LED TALK

#### 'What's In The Sky'

An interactive 360° look at what is in the sky today and tonight. True to life and in real-time.  
 Topics from;

- Aboriginal Astronomy and Stories.
- Stars & Planets.
- Constellations & their mythology.
- The motion and patterns of the Sun, Moon and Planets through the sky.
- The birth and death of Stars.
- Southern Cross and Star navigation.
- The Milky Way.
- Questions and answers.

Feel free to ask for this presentation to focus on any particular topic—eg Aboriginal Astronomy and stories.

Please note that all presentations are subject to change and variation due to circumstances and/or time restrictions.