



## STAGE 5 PRESENTATION OUTLINE

Each presentation lasts approximately 40-60 minutes and includes two sections.

Presentations can be customised to your students' learning level and topic focus. Please let us know if there is anything in particular you would like to focus on.

### SECTION 1. PRESENTER-LED TALK.

(Please choose one of the presenter-led talks below.)

#### Presenter-led sky talk - 360°

Topics from:

- What's in the sky tonight? An interactive 360° look at what is in the sky today and tonight.
- Aboriginal and Torres Strait Islander Peoples' Cultural Knowledges of astronomy.
- How Aboriginal and Torres Strait Islander Peoples have developed sustainable harvesting practices and Cultural protocols based on deep ecological understandings.
- Aboriginal and Torres Strait Islander Peoples use the sky to identify weather, seasons and animal behaviour.
- Aboriginal Dreaming Stories.
- Stars, galaxies, nebulae, supernovas, exoplanets and black holes.

#### Presenter-led Travel The Universe talk - 360°

Travel through our closest 120,000 galaxies.

How big is the Milky Way?

How many galaxies are there in total?

How big is the Universe?

Can we travel to these far-off places? How long will it take us to get there?

## SECTION 2 - 360° SURROUND MOVIE

(Please choose one of the movies below or let us help you decide.)

### 'Our Living Climate'

Exploring the Earth over millions of years, we discover a climate that is constantly changing. Sometimes the changes are gentle and at other times catastrophic. This show looks at the delicate balance that makes life on Earth possible and sets our planet apart from other worlds in the solar system.

- The characteristics of climate change.
- The consequences of climate change.
- The effects of climate change on the water cycle and ecosystems.
- How weather patterns, ice ages, and new life forms have endlessly transformed Earth's climate.
- The impacts of human action on the climate and how scientists measure and detect those changes.
- The importance of the atmosphere and oceans for life on Earth.

### 'We Are Stars' - <https://www.planetarium.com.au/we-are-stars>

Where did it all come from? How did it all begin? What are we made of?  
Can it really be true that we are made of stars?

Starting with the Big Bang, explore the secrets of our cosmic chemistry, atoms, gravity, element creation, our explosive beginnings and connect life on Earth to the evolution of the Universe.  
Incorporates branches of biology, chemistry, and physics.

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

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

- Investigates how satellites collect global data, including data on ocean temperatures, sea levels, and forest and ice cover, and examines how this data is used to evaluate the impact of climate change.
- The consequences of climate change.
- Alternatives to the current resource use, including how to reduce, reuse and recycle
- The links between human activity and environmental pollution.

### 'Capturing The Cosmos' - <https://www.planetarium.com.au/capturing-the-cosmos>

Imagine being able to see more than astronomers have ever been able to see before. What would it be like to peer back in cosmic time, into the vast blackness of space and witness how the universe has evolved into what we see around us today?

How have Australian scientists contributed to the world of Astronomy?  
Explore the Universe through observation, experimentation and analysis.

### **'One Step Beyond'** - <https://www.planetarium.com.au/one-step-beyond>

One small step was just the beginning. Now, we take one step beyond – driven by curiosity, bound for Mars, and ready to write the boldest chapter in human exploration.

Experience the thrill of launch, the challenges of life in space, the cutting-edge technology of NASA's Artemis program, and the search for life that could transform how we see our planet, our past, and our place in the cosmos – as we prepare for humanity's biggest step yet: setting foot on Mars.

### **'We Are Astronomers'** - <https://www.planetarium.com.au/we-are-astronomers>

Do you know what an astronomer does? Today's astronomer is not the lone observer of past centuries. We Are Astronomers reveals the global collaboration, technology and dedication required to answer the unresolved questions of the Universe. Travel from the Big Bang to the future of astronomy, see the James Webb telescope and take a hurtling trip around the Large Hadron Collider at CERN.

Explores why scientific research is usually collaborative and builds on the work of others.

### **'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.

### **'Einstein's Gravity Playlist'** - <https://www.planetarium.com.au/einsteins-gravity-playlist>

Join Lucia, a PhD student in physics, on an exploration of how gravitational waves are formed. Explore Einstein's famous theory that predicted the existence of gravitational waves, how they move through the universe, and how scientists like her work to hear them.

Tish Bressee, NASA JPL Solar System Ambassador had this to say: "Outstanding! I think Physics students of all ages should see this in the dome planetarium."

These eight movies are our most popular for Stage 5 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>

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