



STAGE 5 PRESENTATION OUTLINE

Each presentation lasts for approx an hour and includes 3 sections.
Presentations can also be tailored to your students level of learning.

Section 1 - Presenter-led

We go on an interactive journey looking at our solar system, galaxy and universe.
The presenter-led talk focuses on Stage 5 syllabus outcomes - describes changing ideas about the structure of the Earth and the universe to illustrate how models, theories and laws are refined over time by the scientific community. We talk about how different astronomers (Ptolemy, Aryabhata, Copernicus, Galileo, Newton, Kepler) have contributed to advancing scientific understanding of the solar system and how our view of the universe changes as technology improves. We also look at how big the universe is and our place within it.

*Covers Stage 5 syllabus outcomes.

Section 2 - 360° movie

We have a number of choices here. Choose your own or let us decide.

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

Sizing Up Space explores the scale of the universe.

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..

*Covers Stage 5 syllabus content -

Outline some of the major features contained in the universe, including galaxies, stars, solar systems and nebulae.

Use appropriate scales to describe differences in sizes of and distances between structures making up the universe.

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

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.

It's beautifully produced, has a great soundtrack and is narrated by former Doctor Who actor David Tennant.

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c) '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?

There's a whole lot of sky up there. And not only are we starting to discover what's in it, but we're starting to see how it all fits together.

Capturing the Cosmos is a new show created by Melbourne Planetarium in partnership with CAASTRO. Narrated by Academy Award-winner Geoffrey Rush, Capturing the Cosmos explores CAASTRO's cutting edge research about our place in space.

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d) 'Phantom Of The Universe' <https://www.planetarium.com.au/phantomoftheuniverse>

Dark matter, from the Big Bang to its anticipated discovery at the Large Hadron Collider. Narrated by Tilda Swinton, this amazing story reveals the first hints of its existence. It describes the astral choreography witnessed by Vera Rubin in the Andromeda galaxy and then plunges deep underground to see the most sensitive dark matter detector on Earth, housed in a former gold mine.

From there, it journeys across space and time to the Large Hadron Collider at CERN, speeding alongside particles before they collide in visually stunning explosions of light and sound.

*Covers Stage 5 syllabus content -

describe, using examples, some technological developments that have advanced scientific understanding about the universe.

Scientific understanding, including models and theories, are contestable and are refined over time through a process of review by the scientific community.

e) '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.

These 5 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 level of learning.

Section 3 - Presenter-led 360° presentation

'What's In The Sky'

A 360° interactive look at what is in the sky today. True to life and in real - time. We look at the motion of celestial objects through the sky, constellations, mythology, the birth and death of stars and then at the end we try to leave enough time for questions.

