STARR'S PLANETARIUM

STAGE 5 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, Galaxy and Universe.
Topics from;

- How different astronomers throughout history (Ptolemy, Aryabhata, Copernicus, Galileo, Newton, Hubble) have contributed to advancing scientific understanding of the solar system and how our view of the universe has changed as technology improves.
- How our scientific knowledge changes as new evidence becomes available.
- How big the universe is and our place within it.
- The origins of the Big Bang theory and how it can be used to explain the origin of the universe.

***Covers Stage 5 syllabus content.**

- Major features contained in the universe, including Galaxies, Stars, Solar Systems and Nebulae.
- Technological developments have advanced scientific understanding of the Universe.
- Scales to describe differences in sizes and distances between structures making up the Universe.
- Objects exert a force of gravity on all other objects in the Universe.
- How the Big Bang theory can be used to explain the origin of the Universe and its age.
- Scientific thinking about the origin of the Universe is refined over time through a process of review by the scientific community.

* Stage 5 syllabus content is covered between our 360° movies and the presenter-led talks.

SECTION 2 - 360° SURROUND MOVIE

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

‘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.

‘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.

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

“Roll Up, Roll Up, Roll Up!... Come inside and experience the universe like never before.”
“Let us take you on a journey through Space and Time.”

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

Starting with the Big Bang, explore the secrets of our cosmic chemistry, the elements, our explosive beginnings and connect life on Earth to the evolution of the Universe.
"A must-see for high school chemistry students"

'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.

‘Forward To The Moon’ - https://www.planetarium.com.au/forward-to-the-moon

Kari Byron from MythBusters launches us on a journey beyond the Earth towards a sustainable future in space.
NASA’s 21st-century Artemis program, named after the Greek moon Goddess and twin of Apollo, is the next step in our mission to explore the universe and land the first woman and person of colour on the surface of the Moon.

Take a deep dive into this mission designed to bring astronauts to and from the moon like never before.

‘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 Bresee, 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 7 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

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 & Nebulae.
- Constellations & their mythology.
- The birth and death of Stars.
- Southern Cross and Star navigation.
- The Milky Way.
- Questions and answers.

Alternative option:
Galactic Journey - A journey through our nearest 120,000 Galaxies. Exploring our part of the Universe; Asking some of the biggest questions.

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.