**STAGE 3 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.

**St 3 - Knowledge of our world and beyond inspires sustainable solutions**

ST3-SCI-01 Uses evidence to explain how scientific knowledge can be used to develop sustainable practices.
ST3-PQU-01 Poses questions to identify variables and conducts fair tests to gather data
ST3-DAT-01 Interprets data to support explanations and arguments

**SECTION 1. PRESENTER-LED TALK.**
**(Please choose one of the presenter-led talks below.)**

**Our solar system is a part of one of billions of galaxies in the Universe**

Presenter-led Solar System and universe talk - Flat Screen.
Topics from;

- The Earth and its place in the Solar System
- The relationship between the Earth, Moon, Sun & Planets.
- Planets and their relative sizes.
- Our place in the universe,
- Stars, galaxies, nebulae, exoplanets and black holes.
- Astronomical features that exist beyond our solar system.
- So, how big is the universe really?

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.
- How Aboriginal people use the sky to teach sustainable practices to protect the environment.
- Sharing environmental knowledge about how best to care for Country and Place,
- Totemic systems.
- How Aboriginal and/or Torres Strait Islander Peoples' Knowledges of the positions of the Sun, Moon and stars are used for navigation and wayfinding.

## SECTION 2 - 360° SURROUND MOVIE

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

**Knowledge of our world and beyond inspires sustainable solutions.**
**A fixed amount of usable matter makes up all the material on Earth.**
**Earth's climate is affected by natural and human activities.**

***Recommended Movie*  '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.

- Satellite technologies are used to collect weather data and inform us on how we can look after our planet.
- Flowers, fruit, and seeds are adaptations for plant reproduction that encourage pollination by birds or bees.
- Sugars encourage animals to eat and disperse plants and seeds.
- The flow of matter and energy between plants and animals in an ecosystem.
- How the loss or introduction of plants or animals affects an ecosystem.
- How recyclable, reusable, renewable, biodegradable and compostable materials enhance sustainability.
- Ways to collect and process waste to reduce pollution or increase the sustainable use of materials.
- Sustainable practices used in a community address identified environmental concerns—e.g., managing water resources and reducing pollution.
- The differences between climate and weather
- The effects of natural events on the atmosphere.
- The effects of natural events and human activities on climate.
- How Satellites interpret data to support scientific explanations and arguments.

**Research how living things can travel and survive in space**
**Examine the development of our knowledge through discoveries and technologies, and how these benefit humankind**

***Recommended Movie* '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.

***Recommended Movie* '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.

**'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.

**'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.

**'The Great Solar System Adventure'** https://www.planetarium.com.au/the-great-solar-system-adventure

Join showman extraordinaire "The Great Schiaparelli" as he takes the audience on a death-defying space-time adventure within his wondrous Observatorium.
From the sun-scorched surface of Mercury to the icy expanses of Pluto and beyond, prepare to encounter the myriad dangers and wonders of our Solar System on a breathtaking tour that reveals just how precious our home planet really is.
Be warned though, the Observatorium isn't just for show. It will transport the audience right to the heart of some of the deadliest locations in our slice of the heavens. It's going to take some fancy flying to get everyone back in one piece!

**'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 eight 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

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