



## **Expedition: Solar System 2D or 3D**

KS1 / KS2; duration: 30 minutes; presenter-led

Board the UK's only 3D Planetarium for an interactive expedition across the Solar System. Discover why moons aren't planets and choose where we visit along the way.

**Key Words:** Space. Astronomy. Exploration. Stars. Planets. Sun. Solar System. Moons. Dwarf planets.

### **Content:**

Take a whistle-stop tour of the planets of the Solar System.

Investigate Earth and its Moon.

Investigate the moons of Mars.

Visit Pluto, a dwarf planet.

Clap to decide what else we look at on the way. Planet Mercury or an asteroid named Ida with its own moon.

Jupiter's moon Ganymede or Saturn's moon Pan.

### **This is an interactive show:**

At certain points during the show, the audience will be asked to clap for their preferred destination.

A member of the audience will be given a button that will capture screenshots of what's on the dome. Their screenshots will then be displayed during the photo opportunity at the end of the show.

A member of the audience will be given an X-Box controller that will allow them a few minutes of control over our view on the dome.

### **Learning objectives. Students will:**

Learn about the planets, moons, and objects within our own Solar System.

Learn how we get night and day as we orbit the Sun.

Learn how long the Moon takes to orbit the Earth.

Learn what officially defines a planet and why moons and dwarf planets do not meet this definition.

Develop a deeper understanding of the size and scale of the Solar System and beyond.

Be inspired by the immersive setting of the Planetarium to continue their learning through space.

### **Curriculum Links:**

#### **Lower KS2: Working Scientifically**

Making systematic and careful observations.

Using straightforward scientific evidence to answer questions or to support their findings.

#### **Lower KS2: Light**

Recognise that light from the sun can be dangerous and that it's not safe to look directly at the sun.

#### **Upper KS2: Earth & Space**

Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.

Describe the movement of the Moon relative to the Earth.

Describe the Sun, Earth and Moon as approximately spherical bodies.

Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Learn that the Sun is a star at the centre of our solar system and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

Understand that a moon is a celestial body that orbits a planet.



## Potential Hazards and Accessibility

3D shows are strictly for ages 6 and over. Expedition: Solar System 2D is available for Year One groups.

## Related Activities

**Exhibits:** Ground floor exhibits under the theme '*Is there another me in the Universe*'.

**Workshops:** Earth, Sun, & Moon, KS1 Destination Space, KS2 Destination Space.