

# Sun, Earth and Moon

A planetarium program designed for grades 2 and up.

## Learning objectives for each student

- 1 Describe which side of the sky the Sun rises and sets on and why.
- 2 Describe where the Sun and Moon must be when the Moon is "full."
- 3 Describe the tilt of the Earth's axis and how this affects the seasons.
- 4 Describe the shape of the Earth's orbit around the Sun and how this affects the seasons.
- 5 Describe the motions we call "rotation" and "revolution" and how they differ.

## Pre-visit activities

- 1 Have the students read about the changing seasons.
- 2 Have the students discuss the motions that we "see" in the sky, and how these motions might be explained.
- 3 Describe how mythologies about these motions were so long accepted as truth.

## Vocabulary

These words or terms are used in "Sun, Earth and Moon". Some may be new to your students.

rotation

revolution

rise

set

season

latitude

circumpolar

cardinal point

axis

orbit

## **Program summary**

This live, question-based program, makes extensive use of the planetarium instrument, globes and slides, and the prior knowledge of your students. We examine rotation and revolution, day and night, orbits, seasons, and motions of the Sun. Students answer and guess about what they see happening in the sky. An interactive discussion helps to compare these solar system objects to each other.