



# Our Cosmic Journey in Space

## A Pre-Visit Information Guide for Teachers

Meets the following RI GSE requirements: ESS2(K-2)-7, ESS2(3-4)-7, ESS2(3-4)-8, ESS3(K-2)-9, ESS3(3-4)-9

This may be the first visit to the Planetarium for many of your students. We have found that both cognitive and affective learning can be increased when teachers use structured activities before and/or after the visit to create a context for the experience and link with the classroom instruction. In this guide we have provided some interesting facts about the Cormack Planetarium and include background information about the astronomy content that will be presented in ***"Our Cosmic Journey in Space."*** We encourage teachers to conduct pre-visit and post-visit classroom discussion and activities with their classes to make the most of their field trip experience.

### ABOUT THE CORMACK PLANETARIUM:

- In a planetarium, objects in the universe are projected, as they exist at any time in space.
- These celestial objects are projected onto a dome-shaped ceiling so it appears that one is looking up into the night sky.
- Our Star Projector is capable of displaying images of over 7,000 stars...many more than anyone can see without the aid of a telescope. Planets, comets, satellites and the Milky Way and Andromeda Galaxy can also be projected.

### OUR COSMIC JOURNEY IN SPACE

Why do the objects we see in the nighttime sky seem to move during the night? Why don't we fall off the Earth as it rotates? If the Sun is so big, why does it look so small in the sky? What are the other planets in our solar system like? If your students have been asking you these questions, they'll know all the answers and more after viewing "Our Cosmic Journey in Space."

The show's main character is Scarlet, a macaw. She has stumbled across a crossword puzzle about space. While reading the clues, she realizes she may not have all the answers, such as: "The opposite of night". So, she takes us on a whirlwind journey to find the answers she needs. We travel around the world, through the Solar System, and into outer space to enlist the help of her friends in the animal kingdom. During each visit, the animals and your students will work together to discover and understand the mysteries of the Universe.

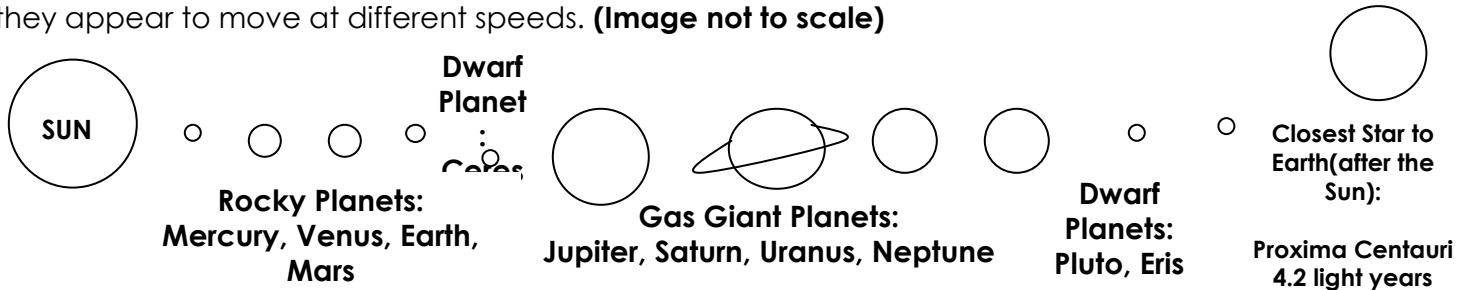
Students will learn about the rotation of the Earth, gravity, distance and scale, constellations, planets, stars, and other space topics. Students are sure to enjoy this lively and interactive planetarium experience.

### SUGGESTED CONCEPTS TO REVIEW INCLUDE:

CONSTELLATION	GRAVITY	ROTATION
DAY	NIGHT	STAR
EARTH	PLANET	STAR PATTERN
GALAXY	PLANETARIUM	SUN

## HELPFUL INFORMATION: LOOKING AT THE NIGHT SKY

Look up on a clear night, and you can see a variety of objects passing by. By looking long enough, you will begin to notice differences between some of the things you see. Some of the tiny points of light seem much brighter than others. Now, you begin to notice different colors. Then, something strange happens. A couple of the "stars" seem to be moving in front of others. Actually, you are probably looking at a planet. Planets are closer to the Earth than the stars, so they appear to move at different speeds. **(Image not to scale)**



## ACTIVITIES:

Teachers are encouraged to conduct pre-visit and post-visit classroom discussions and activities with their classes to make the most of their experience. Have the students make a constellation of their own. Drop a small handful of beans on a piece of black construction paper. Glue the beans down. After the glue has dried, use a white crayon or chalk to connect the beans to create a picture. Let the students either tell or write a story about their constellation. Tell them to be sure to give their constellation a name.

## WEBSITES

StarChild: A Learning Center for Young Astronomers  
<http://starchild.gsfc.nasa.gov/>

For more links visit our website at:  
[www.providenceri.com/museum](http://www.providenceri.com/museum)