



Our Place in Space

A Pre-Visit Information Guide for Teachers

Meets the following RI GSE requirements: ESS2(3-4)-8, ESS3(3-4)-6, ESS2(5-6)-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 links with their 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 Place in Space!"** We encourage teachers to conduct pre-visit and post-visit classroom discussions 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 PLACE IN SPACE

Get ready for the field trip of a lifetime! Join us for a tour through our Solar System and beyond. We will take off from the Planetarium, on our way to discovering the mysteries of the Universe. How are stars formed? What is the difference between a star cluster and a constellation? How many types of planets are in our solar system? The answers to these questions and more will be revealed in "Our Place in Space."

As your class journeys through our Solar System, you will explore each of the planets. Discover the classification of objects in our Solar System (Rocky Planets, Gas Giant Planets, Dwarf Planets and Small Bodies), while gaining an understanding of each planet's geology. Learn about the smaller bodies in our Solar System, such as, comets, asteroids, and moons. Observe how the planets and our moon look from the Earth's surface.

Learn how stars are formed. Some star clusters and constellations are pointed out during the program, as well as the five visible planets. By observing the immense variety of objects that exist throughout the vastness of the Universe, students will gain a better understanding of the world around them, truly realizing "Our Place in Space."

SUGGESTED CONCEPTS TO REVIEW INCLUDE:

ASTEROIDS	GEOLOGY	ROCKY PLANET
ATMOSPHERE	ICY BODIES	RINGS
COMETS	MOONS	SMALL BODIES
CONSTELLATION	NEBULA	SOLAR SYSTEM
DWARF PLANET	ORBITS	STARS
GAS GIANT PLANET	PLANETS	STAR CLUSTER

ACTIVITIES: WHERE DO WE GO FROM HERE?

Teachers are encouraged to conduct pre-visit and post-visit classroom discussions and activities with their classes to make the most of their experience. Until now, the furthest any human being has been beyond our Earth is to our Moon. NASA is developing plans to send humans back to the Moon to prepare them for a voyage to Mars. Students will study the geology and environment on Mars. They will determine the limitations that exist for humans to survive on Mars. Students will be able to devise a list of requirements the next generation of explorers will need to make the Mars missions a success.



Suggested Websites:

NASA: Main Site

<http://www.nasa.gov/>

Mars/Earth Comparison

http://www.nasa.gov/vision/earth/environment/Sibling_Rivalry.html

Review the Universe on-line

<http://www.historyoftheuniverse.com/>

For more links visit our website at:

www.providenceri.com/museum