National Park Service U.S. Department of Interior Rock Creek Park



### ROCK CREEK NATURE CENTER AND PLANETARIUM Washington, DC 20015 (202) 895-6070

Dear Teacher,

Thank you for scheduling a curriculum based planetarium program especially designed for your students. We hope this program becomes an integral part of your class's learning experience. We have found that students gain a greater appreciation for the natural world by coming to Rock Creek Park, our "outdoor classroom".

The program will take place mostly inside our planetarium, a round room with a dome - shaped ceiling. Inside, students will watch as an imaginary sun sets and the room darkens. Stars, moon and distant planets will become visible, as though it were night. In fast motion, the students will see tonight's entire night sky, until it yields to daylight. Because most of this program takes place in the dark, please instruct students to stay seated and remain quiet. Questions will be answered when the lights are turned on again at the end of the presentation.

Enclosures include background information on the program, pre and posttrip activities, and a teacher questionnaire.

If you have any questions or comments, please feel free to contact us at (202) 895-6070.

We look forward to your visit.

Sincerely,

Rock Creek Park

# **Rock Creek Park**

National Park Service
U.S. Department of the Interior

Rock Creek Park http://www.nps.gov/rocr/



### National Park Service Rock Creek Park Nature Center and Planetarium

### **WONDERS OF THE NIGHT SKY**

Watch the sun set and reveal a star covered sky. Use your imagination and play connect the dots to create star pictures. Listen to stories about bears, dragons, lions, or a beautiful queen. See the night sky as though you stayed up all night long. All of these experiences, and more, are included in "Wonders of the Night Sky."

**TOPIC: Basic Astronomy** 

#### **BACKGROUND INFORMATION:**

Unfortunately, many inter-city children do not have the opportunity to see the full night sky. Marred by light pollution coming from building and street lights, only a few stars can be seen.

The Rock Creek Park Planetarium enables us to display the night sky on a dome-shaped ceiling either with light pollution or free of it. The projector also controls time, so it can display stars throughout the night, slowing time down or speeding it up.

Where: Rock Creek Park Nature Center Planetarium

Length: 45 minutes

Attachments: District of Columbia Public School Science Standards, grades 1-3

**Audience:** 1<sup>st</sup>-3<sup>rd</sup> grade classes

Students per group: maximum of 70

Chaperones per group: 5 recommended

**OBJECTIVES:** By the end of the program, students will be able to;

- I. Demonstrate how the earth spins.
- 2. Describe how the stars, sun and planets seem to move together across the sky.
- 3. Name at least one constellation.

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## WONDERS OF THE NIGHT SKY PRE AND POST - VIST ACTIVITIES

Prior to your visit to Rock Creek Park, please prepare your students for their planetarium experience. The pre - trip activity is important because children at this age vary immensely in their knowledge of basic astronomy, the solar system, and space. Sharing with each other first can help level this problem. The post - trip activity is designed to reinforce the program by reviewing some of the constellations while also enabling the students to use their imagination to create more.

**Pre-visit**: Pass out copies of "Our Solar System" (see attachment). Encourage students to share what they know about each of the planets.

**Post-visit**: Pass out copies of star charts and allow the children to connect the dots and recall some of the constellations presented in the program, or to create their own. Some children also enjoy creating make believe stories to go along with their constellations.