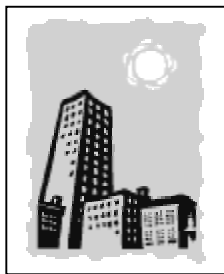




2004-2005
Group Visit Guide

Skies Over Nashville



For Grades 3 and Up

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Objectives



1. Confirm whether or not any planets are visible in the evening sky, identify the planet, and describe where it would appear.
2. Find and locate at least one constellation.
3. Identify at least one cause and effect of light pollution.

Pre-Visit Activities

- Download the monthly star chart from our website. Encourage students to locate the constellations and any planets visible in the evening sky.
- Have the students read myths or stories involving the constellations. Greek and Roman stories are usually very easy to find in libraries. As a creative writing assignment, have older students rewrite an ancient myth, retelling it in a modern form, using the language and imagery of today.



Program Summary

Skies Over Nashville is a live program in which a planetarium educator shows the audience how to locate and identify naked-eye seasonal constellations, bright stars, planets and any other interesting sky objects visible on the date of the planetarium visit. The audience is invited to ask questions and participate in the presentation.

Vocabulary

- asterism
- binoculars
- constellation
- galaxy
- Milky Way
- planet
- planetarium
- pollution
- projector
- spiral
- telescope

Post-Visit Activities

- Download the monthly star chart from our website. Encourage students to locate the constellations and any planets visible in the evening sky.
- Draw a random collection of 10 to 15 dots on the board.
 - Ask students to look at the dots for 30 seconds, then have students redraw the dots on a piece of paper without looking back at the board. Discuss how difficult it is to remember the locations. What can they do to make it easier to recall the dots? Lead the students into discovering that grouping the dots into familiar shapes, letters, etc. will make it easier to remember the positions. Try the experiment again and see if it works. Discuss how this relates to the sky and constellations. Examine star charts and talk about why some of the patterns may have been created.
 - Have the students play connect the dots and find a picture. Have them write or dictate a story about their constellation and give it a name. Share individual pictures with the class or display their creations.
- Pick one of the constellations visible in the current night sky.
 - Present other cultural interpretations and the related stories for that constellation.
 - Have each student research a particular constellation and how many different myths or illustrations accompany it.
 - Have the students make up their own modern myths or change a classic myth so that it sounds like it took place today.



Your comments and suggestions are important.
Please take a moment to fill out the ASC Evaluation!

Post-Visit Activities: Continued

- Using a globe, demonstrate the difference between rotation (turning around an axis) and revolution (orbiting/moving around another body).
 - Go outside and divide students into groups of two. One student will be the Sun and one the Earth. Divide groups into threes and make the third student the Moon. Now have all three create a simulation of the Sun, Moon, and Earth, showing rotation and revolution all at the same time. You could also have students stand and act out both movements in a big circle with one student acting as the Sun in the center of the circle. Emphasize how all three objects are rotating and be prepared for a dizzy experience!
 - Demonstrate how we see different constellations in different seasons because as the Earth orbits the Sun during the year the night side of the Earth is facing a different part of the sky/celestial sphere.

Resources

The New Patterns in the Sky by Julius Staal:
<http://www.mwpubco.com/44.htm>

Monthly star charts and related articles:
www.SudekumPlanetarium.com

Clever astronomy demonstrations using paper plates:
<http://analyzer.depaul.edu/paperplate/>

Mythology:
<http://www.bulfinch.org/>
<http://www.pantheon.org/>
<http://homepage.mac.com/cparada/GML/>

Resources: Continued

International Dark Sky Association (IDA):

<http://www.darksky.org/>

Earth and Sky – Daily astronomy radio program:

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

StarDate – Daily astronomy radio program:

<http://stardate.org/teachers/classroom.html>



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