

Introduction to Constellations

Grade Level: 4, 5, 6

Subject(s):

- Science/Astronomy

Duration: Three 30-minute sessions

Description: Students learn about constellations found in the North Polar Region, including Ursa Major, Draco, Pegasus, Hercules, and Cassiopeia. Students use chalk, star stickers, and construction paper to construct a model of a constellation.

Goals: Students will be able to identify at least five major constellations.

Objectives:

1. Students will be able to define the terms *star* and *constellation*.
2. Students will be able to identify the following constellations: Ursa Major, Draco, Pegasus, Hercules, and Cassiopeia.
3. Students will be able to construct a model of a constellation.

Materials:

- star stickers (preferably stars that glow in the dark)
- black and blue construction paper
- scissors
- chalk
- overhead projector
- [Constellations Handout](#)

Vocabulary:

1. star - A hot rotating ball of gas that creates its own light.
2. constellation - A pattern of stars in the night sky.

Procedure:

Open the lesson with a review of the planets. Review the mnemonic used to remember the order of the planets: "My very educated mother just served us nine pizzas." (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto.) Then proceed to give some scientific explanation about constellations and stars. "What are stars? Stars are hot rotating balls of gas that create their own light. What are constellations? Constellations

are patterns of stars in the sky." On the overhead, show a map of the night sky. Point out the following constellations: Ursa Major, Draco, Pegasus, Hercules, and Cassiopeia. Give some background information about these major constellations. (Give each student a handout about the five constellations.)

Provide students with the following handouts (printed from the web sites listed below): Constellation Pronunciation Guide, Alphabetical Listing of Constellations, and Evening Sky Map. Distribute black or blue construction paper to each student, along with an ample amount of star stickers and a piece of chalk. Give each student the name of a constellation. Instruct the class that you want them to locate their constellation on the Evening Sky Map. Allot time (10 – 15 minutes) for students to design their constellation with the star stickers, construction paper, and chalk. After students have completed their constellations, have them present their constellations to the class. Students should point out their constellations on the overhead. Close the lesson by reviewing the constellations that were learned today.

Extension/Enrichment:

Divide the students into groups of three or four. Inform the class that each group will get a chance to use the computer to research one of the five major constellations, writing down a few facts about that constellation. Then each group will write a small excerpt and inform the class with an oral presentation of facts about that constellation.

Assessment: Each student should have a completed constellation designed on construction paper. Each student should be able to identify the major constellations in the North Polar hemisphere (teachers can informally quiz students by using the evening sky map on the overhead).