

The Sun and Moon

by Gay Luke

Grade level K - 1

Time required

5 sixty minute class periods

Materials/Technology

Six page science journals, pre-made
Crayons or markers
Star stickers
Pictures of Sun, Earth and Moon
“Sioux Story of the Quarrel of the Sun and Moon”
Full Worm Moon
(see references)
Basketball
Baseball
Golf Ball
Yarn
Computer software that shows Sun, Moon and Stars

Summary

Through discussion, looking at pictures, listening to Native American stories, observing, and building models, students will understand basic concepts about Earth, the Sun and the Moon, such as relative movement, the phases of the moon, etc. They will also learn about a traditional Native American calendar based on the lunar cycle.

RSI Curriculum Tub Materials Included

The Sun Is Always Shining Somewhere; Allan Fowler (1991).
What the Moon Is Like; Franklyn M. Branley (1986).
Day Light, Night Light; Franklyn M. Branley, (1998).
Large ball, medium ball, golf ball, and yarn for demonstration purposes.
Five packs of markers
Full Moon NASA poster.
Gibbons Gail, (1967) The Moon Book
Hungry Wolf, A. (1972). A Sioux story of the Quarrel of the Sun and Moon. Legends told by the Old People.
Lemieux, M. (1994). Full Worm Moon.
Goldish Meish, (1989) Does the Moon Change Shape?

Objectives

The student will:

- 1) Observe that the Sun is a star seen only during the day.
- 2) observe that the Moon can be seen during the day and night.
- 3) Keep a science journal with pictures of their observations.
- 4) Talk about scientists who study stars and travel in space.

Montana Science standards addressed

- 1) Students demonstrate knowledge of the composition, structures, processes and interactions of Earth’s systems and other objects in space.
- 2) Students understand historical developments in science and technology.

Assessment

Observe students as they participate in activities. Evaluate their recordings in their completed journals.

Procedure

Day 1

Introduce Sun and Moon by asking students what activities happen during the day, suggesting that people work and go to school during this time. Also ask them what activities happen in the night, for example, families come home, eat, and sleep. Read “Sioux Story of the Quarrel of the Sun and Moon” (see references). This is a story explaining how the Sun and the Moon came to be out at these times. Ask students about what they see in the sky during the day and night. Decorate covers of science journals with Moon, Sun, and star stickers.

Day 2

Tell students that the Sun is actually a star in the sky. The reason it is seen in the day is because it is so close to Earth. Have children describe the Sun: big, bright, hot, orange, yellow, in the sky, etc.. Take the class outside to observe the Sun. They can record their findings in their science journals. Show students the Sun information on the computer. Encourage students to observe the Moon at home in the evening and share their findings the next day.

Day 3

Discuss observations of the Moon with the class, drawing the pictures on the marker board. Ask the class if they have ever looked at the Moon and noticed different sizes. Draw the phases on the board. Explain that the Moon can be seen at night because the Sun shines on it. The Sun shines on certain parts of the Moon at different times, and therefore it looks different. Students will now record phases of the Moon in their journals. Show the class the computer with the phases of the Moon. Mention that the Moon can sometimes be seen during the daytime. Talk about how the Moon goes through these phases every month.

Day 4

Model how Earth orbits the Sun and the Moon orbits Earth. Place the basketball, baseball, and golf ball on the floor. The basketball represents the Sun, placed in the center. Put a large length of yarn outside the Sun, representing the orbit of Earth. The baseball is Earth, placed on the yarn. Show children how Earth orbits the Sun. Mention there are eight other planets that also revolve around the Sun. Place the yarn around Earth. Put the golf ball on the yarn, stating that this is the Moon. Show students how the Moon orbits Earth. Illustrate observations in Sun and Moon journals. Look up astronomer and astronaut on the computer and see what these scientists study.

Day 5

On the last day of this project remind the class about the phases of the Moon. Before some people had calendars they counted the full moons to know what month it was. Read Full Worm Moon (see references). This is a story of how an Algonquian family counted months by the full moons. When the ice began to thaw in the spring, and the air was warmer, the worms would come out during the full moon. They then knew it was time to plant the crops because the worms were getting the soil ready for the new plants.

Further information

For further information about these activities, contact Gay Luke via electronic mail at pesgluke@ronan.net.

References

Hungry Wolf, A. (1972). Sioux story of the quarrel of the Sun and Moon. Legends told by the Old People. Summertown, TN: Book Publishing Company.

Lemieux, M. (1994). Full worm Moon. Singapore: William Morrow and Company.