

Overview:

Students observe changes in the moon.

Objectives:

The student will:

- draw a picture of the moon; and
- record data on the cycle of the moon.

Targeted Alaska Grade Level Expectations:

Science

- [3] SD4.2 The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by recognizing that objects have properties, locations, and movement that can be observed and described.
- [3] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.
- [3] SG2.1 The student demonstrates an understanding of the bases of the advancement of scientific knowledge by comparing the results of multiple observations of a single local event (L).

Materials:

- *The Moon Book* by Gail Gibbons
- Science journal

Activity Preparation:

Start this lesson around the time of a full moon. Choose an observation site that has does not have interference from trees or buildings.

Activity Procedure:

1. Ask students to draw a picture of what the moon looks like in their science journals. Have each student share their illustration with the class. Discuss why the pictures are varied.
2. Read the *The Moon Book* and discuss. Ask students what they learned about the moon and record responses on the board.
3. Tell students that they will be observing the moon for one month and will record what it looks each day.
4. Take students to the observation site chosen. Have students draw the moon in the location of the sky and shape of the moon in their science journal. Each morning have the students go to the site to observe and draw the moon. Remind them to put the date is on each page of the journal. Have them predict what shape and location the moon will be the next day. Compare their predictions the next morning. If the moon is unable to be observed due to weather, use the Internet or a moon calendar to see what it should look like.
5. At the end of week one, discuss what they have observed. Do this at the end of each week for a month. After one month have students write a prediction of how the moon will look the next month. Have them record the same moon observation data for a second month at the same site. Ask students to write what they have learned about the moon and it's cycle in their science journal. By the end of the second month of observation, students should understand that the moon follows a predictable pattern, that the cycle lasts for a specific period of time, and that the moon changes place in the sky.
6. Have students take their journal home and share it with their family after two months of moon observations. Ask an adult in the family to sign that they have shared the journal. The journal should be returned to school.

Extension Ideas:

1. Use dough or clay to make the shapes of the moon seen each month.
2. Read the following books aloud: *The Moon* by Seymour Simon, *The Moon Seems to Change* by Franklyn Branley, *What the Moon is Like* by Franklyn Branley, *When you Look Up at the Moon* by Allan Fowler, *Phases of the Moon* by Molson, and *So That's How the Moon Changes Shape!* by Allan Fowler.