

LETTER TO PARENTS



Dear Parents,

We are about to begin a study of objects in the sky—the Sun, Moon, and stars. We’ll start with the Sun and use a variety of tools to observe and record its position in the sky. To orient our observations, we’ll use a compass. And to monitor the Sun, we will use our shadows. While we use the language that the Sun rises in the east and sets in the west, we know that it really isn’t the Sun moving but the rotation of Earth on its axis that makes it appear that the stationary Sun is moving across the sky. We will be studying the predictable pattern of the Sun as it travels across the sky during the day and during different seasons.

Then we will study the Moon. We will start as a class by observing the Moon during the day and follow that up with night-sky observations. Since we aren’t in school at night, this must be a homework assignment. As a bridge to what we have been studying in class, students will look for the Moon and other objects in the night sky when they are at home.

To make night-sky observations, take your child outside at about the same time each evening (when it’s dark) and observe the sky. Take a few minutes to enjoy the night sky together. Talk about what you see. For example, if it’s cloudy, you won’t see anything but clouds. If it’s clear, you will see stars (you might want to point out a constellation or two), planets (points of light that appear larger and brighter than stars), and sometimes the Moon. Discuss the changes in the night sky from night to night, especially the changing appearance of the Moon, and where you see it in the sky. (You can check your local newspaper to find out when it rises.)

Have your child record his or her observations on the Night-Sky Log (sample below) when I send it home, and bring it to school on the following Friday morning. To complete an entry, your child records the date and time. Have your child write a few sentences about what he or she observed and draw a picture to show what the Moon looks like.

Thanks for your help! And look for the Night-Sky Log coming home soon.



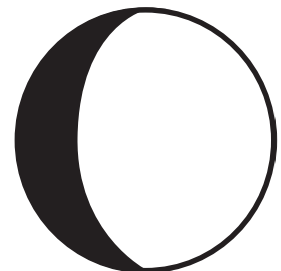
MONDAY Date February 28 Time 6:10 p.m.

Observations _____

The Moon was oval. It was high in the sky.

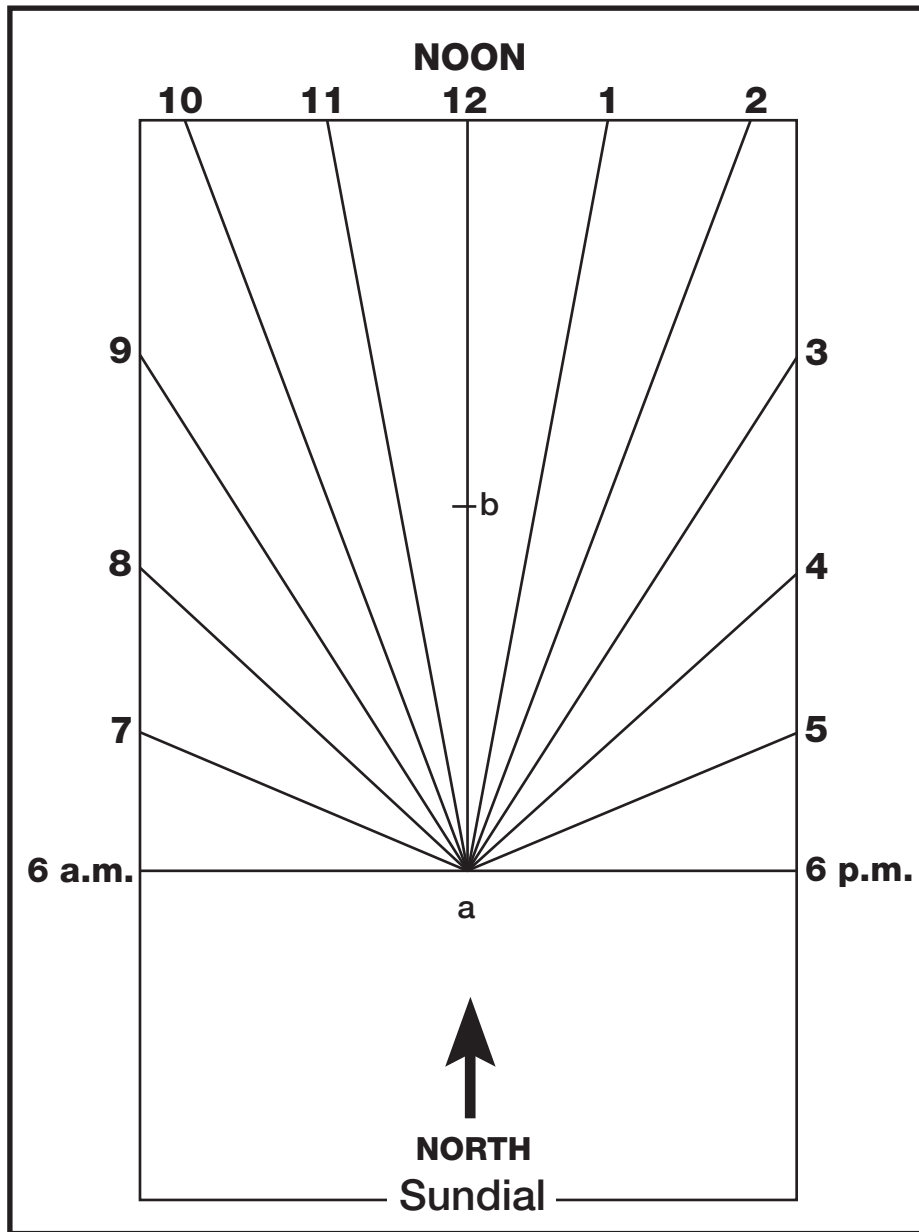
There were lots of stars.

One star in the west was brighter than the rest.

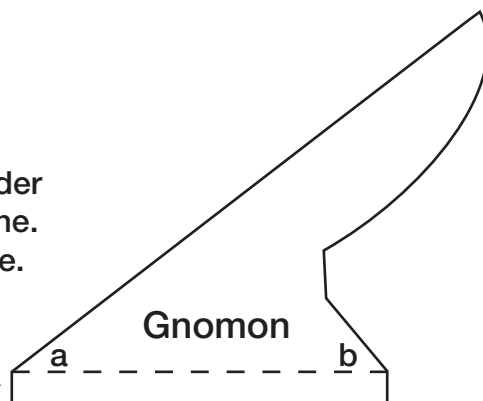


HOME/SCHOOL CONNECTION

INVESTIGATION 1: THE SUN




Fold tab under on dotted line. Tape to base.



Sundial Pattern

This sundial works best at 38° N latitude, the latitude of San Francisco Bay.

Materials

- Cardboard (tagboard or file folder)
- 1 Scissors or mat knife 
- 1 Protractor
- Glue and transparent tape
- 1 Compass

Directions

1. Glue the pattern to a piece of cardboard.
2. Cut out the sundial and the gnomon.
3. Tape the gnomon tab to the sundial on the 12:00 line, matching points *a* and *b*.
4. Place the sundial on a level surface outside. Use a compass to help align the noon end of the sundial towards the North. You can fine-tune the sundial by comparing the time you see on the sundial to the time on a watch. If there is a difference, turn the sundial until the times most nearly match. When you get the sundial adjusted, you might want to mark the location with some chalk. When you place the sundial back in the same position, it should give you an accurate time.

HOME/SCHOOL CONNECTION

INVESTIGATION 2: THE MOON

The full Moon was a monthly beacon in the night sky for Native Americans and early pioneers. Over the years each full Moon acquired folk names that had seasonal or other significance. Some are obvious, like the Harvest Moon of September. Others are more mysterious. Read through the list of names and try to guess why each full Moon got that name. Most full Moons have two or more names.

Make up your own list of names for the full Moons. Bring your list to school to share.

Month	Folk Name
January	Moon after Yule, Old Moon
February	Snow Moon, Hunger Moon, Wolf Moon
March	Sap Moon, Crow Moon
April	Grass Moon, Egg Moon
May	Planting Moon, Milk Moon
June	Rose Moon, Strawberry Moon
July	Thunder Moon, Hay Moon
August	Green Corn Moon, Grain Moon
September	Fruit Moon, Harvest Moon
October	Hunter's Moon
November	Frosty Moon, Beaver Moon
December	Moon before Yule, Long Night Moon