

Subject	Grade	Standard	Objective
Science	First	2. Earth and Space Science	2. Observe and describe changes in the appearance of the sun and moon during daylight.
Content Big Ideas			
Standard 1 Big Ideas – Intended Learning Outcomes			
(SS) The sun can be seen only in the daytime and the moon can be seen sometimes during the day.	(PoS) People can often learn about things around them by just observing those things carefully, but sometimes they can learn more by doing something to the things and noting what happens (raise questions about the world around them, be willing to seek answers to some of those questions by making careful observations and trying things out). (CoS) When doing science activities, it is often helpful to work with a team and to share findings with others. In this sharing, describing things as accurately as possible is important in science because it enables people to compare their observations with those of others (draw pictures that correctly portray at least some features of the thing being described, describe and compare things in terms of number, shape, texture, size, weight, color, and motion). (NoS) When people give different descriptions of the same thing, it is usually a good idea to make some fresh observations instead of just arguing about who is right.	(T) People use appropriate tools and models to investigate the world. (A) People working alone or in groups often invent new ways to solve problems and get work done. (S) The tools and ways of doing things that people have invented affect all aspects of life.	Science, Technology, and Society Big Ideas
Indicators: Measureable Outcomes framed by Standard 1 Big Ideas			
Indicator 1. Observe the sun at different times during the day and report observations to peers. Indicator 2. Observe and chart the moon when it is visible during the day.			
Science language students should be able to use correctly: identify, record, shadow.			
Guidance for Combining Content and Process			
Guidance for Combining Science, Technology, and Society			
Suggested Strategies			
The students can observe the location of the sun at three different times each day during recess. Students can draw conclusions about the patterns and irregularities from their observations. Any observations made by students or groups that don't agree can be followed by continued observation. (L) (PoS) CoS (NoS) The students can measure the size of their shadows during each recess and make comparisons between shadow measurements to sun locations charted earlier. (M) (PoS) Students can observe the moon over the period of four weeks. Students are empowered to decide what observations to make and chart the observations. During the sharing of observations, the teacher draws attention to the variety of the observations students made (shape, position, brightness, etc.). Students engage in a discussion about which observations were most useful in learning more about the moon. (M) (PoS) (CoS) (NoS)	(T) Students can use age-appropriate tools to gather information about the sun and the moon. (A) Students can understand that the position of the sun correlates with the time of day. (S) Students can explain that people pattern their lives around the time of day.	(T) Tools of science (A) Applications of science (S) Implications of science for people	
Earth and Space Science (E) Earth science (SS) Space science	Curriculum Connections (M) Mathematics (L) Language Arts	Processes, Communication, and Nature of Science (PoS) Processes of science (CoS) Communication of science (NoS) Nature of science	Applications: Science, Technology, and Society