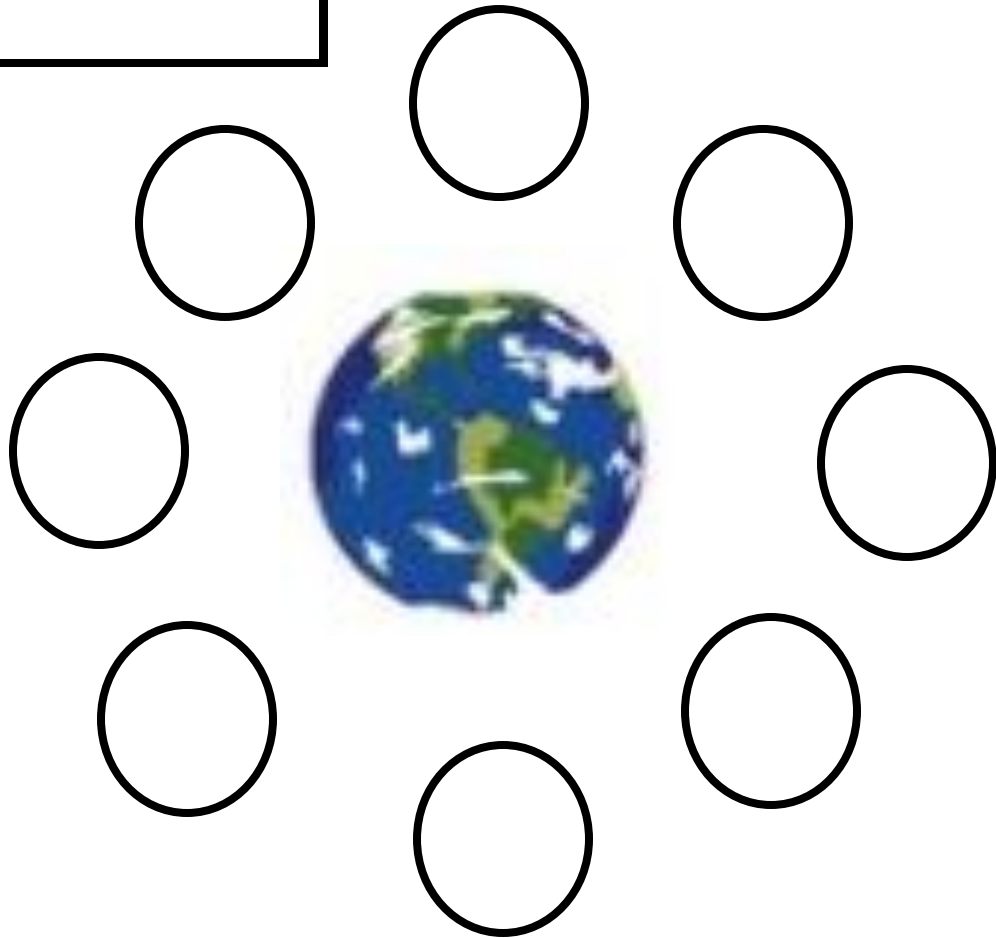
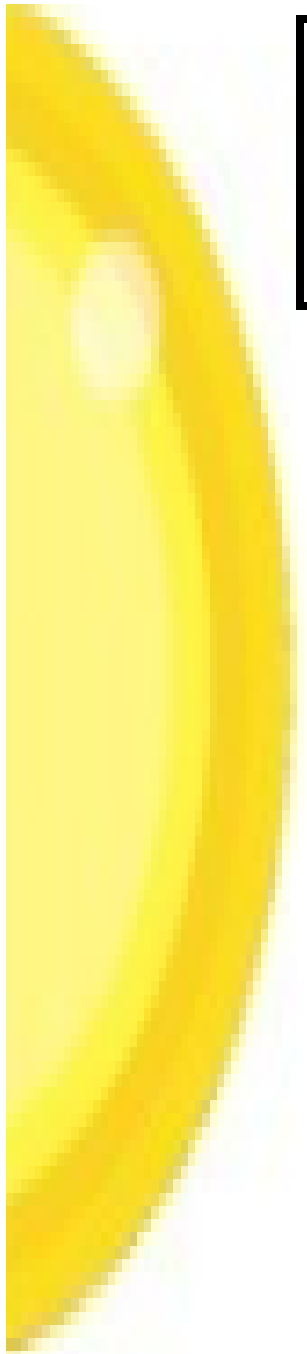
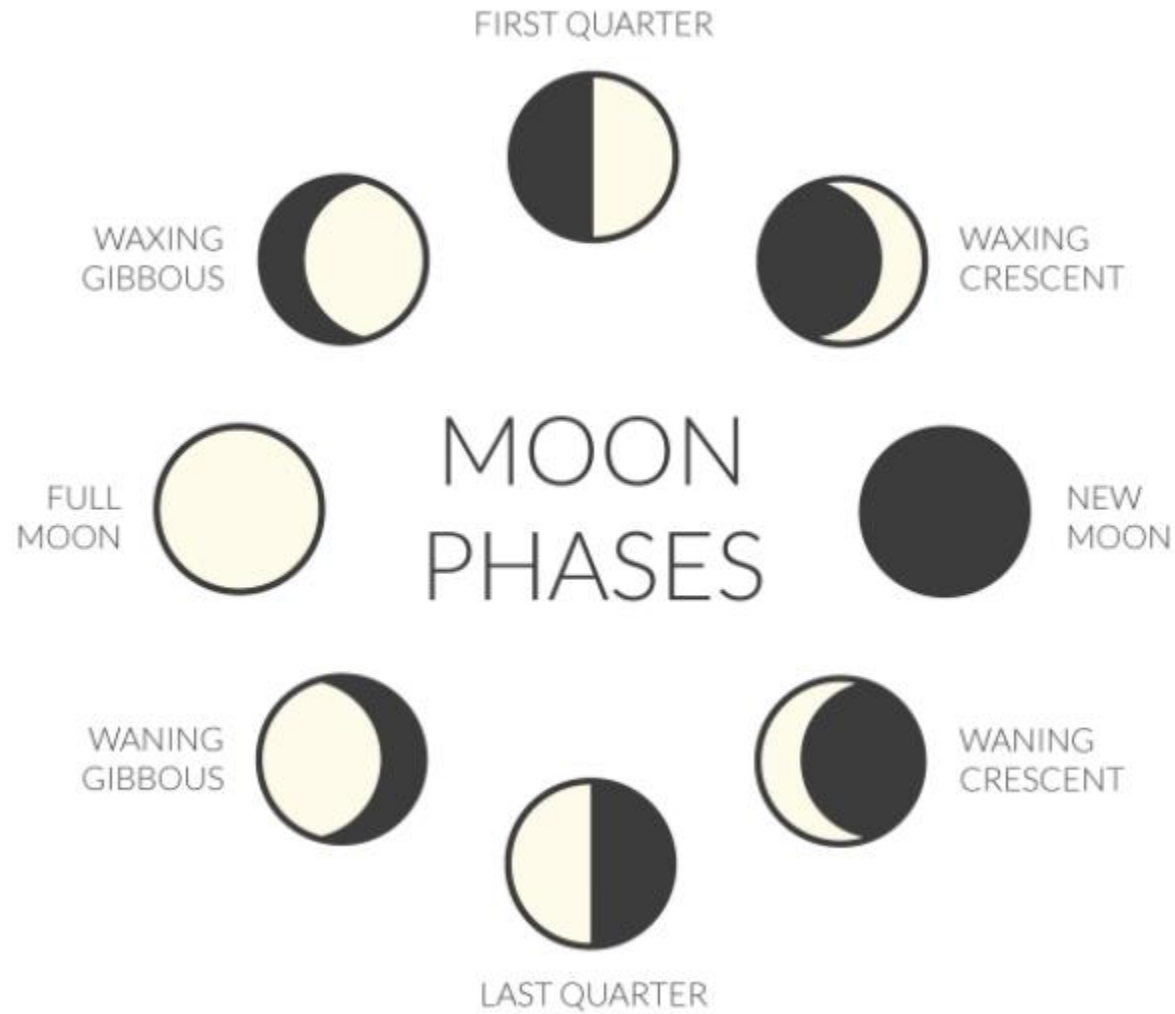


Color in the Moon Phases
based on the position of
the Sun.



Moon Phases Cheat Sheet



Print off 8 sets of the moon phase cards to create a 64-card deck.

Each person gets one of each card.

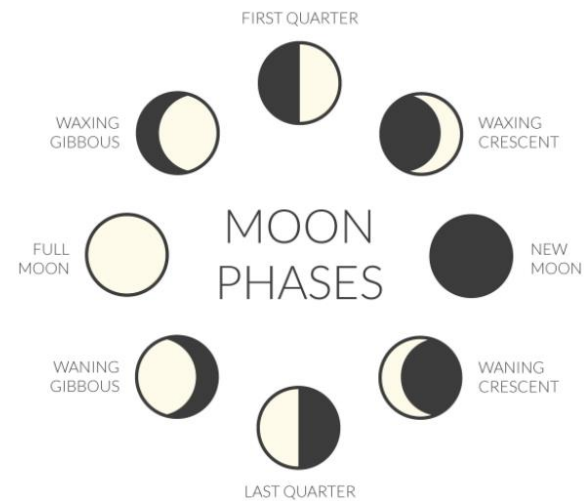
- Step 1 is for each person in the group to create a full moon cycle as if the Sun was at the class door.
- Discuss the cycle with your group as to how you decided to put each card where it is.
- If necessary, you can use the moon phase cheat sheet.

An alternative activity is to use the cards and play moon phase memory.

Moon phase card game

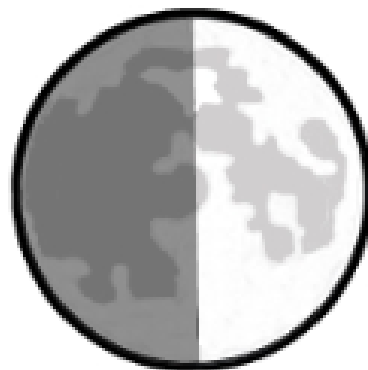
Play with three to four members.

1. Pass out one card to each group member until all of the cards are passed out.
2. The person to the left of the dealer goes first.
3. Start by playing a new moon ●. If the person to the left of the dealer does not have the new moon, the turn passes until someone has the card.
4. The next person has to play the next card in the cycle or a waxing crescent. Use the Moon phase cheat sheet if you need assistance with which card to play next in the cycle.
5. The first person to get rid of all of their cards wins.





Full Moon



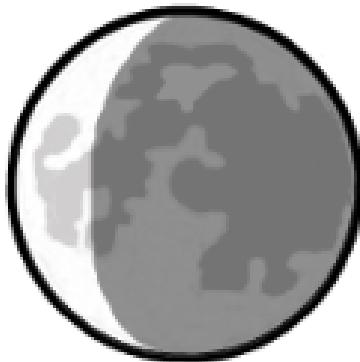
First Quarter



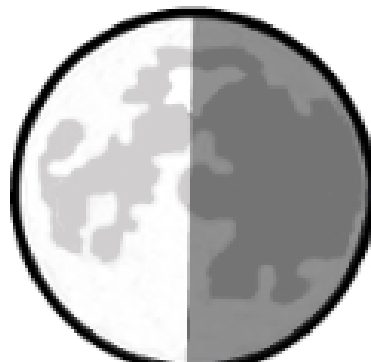
Waxing Gibbous



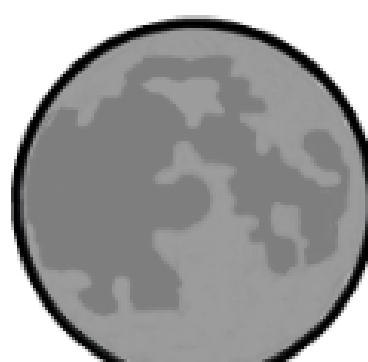
Waning Gibbous



Waning Crescent



Last Quarter

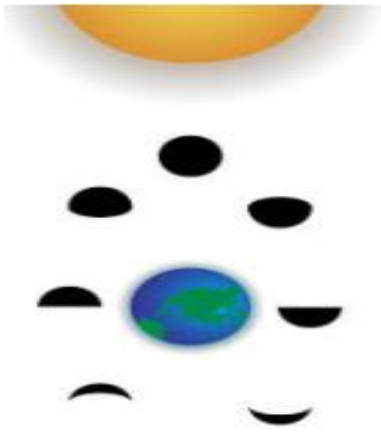


New Moon

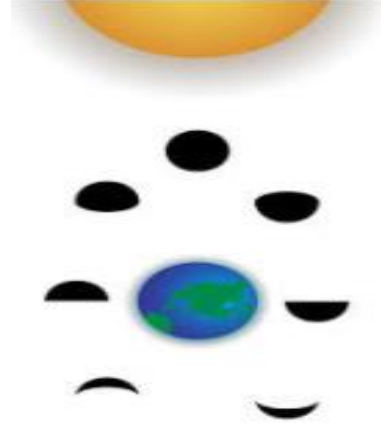


Waxing Crescent

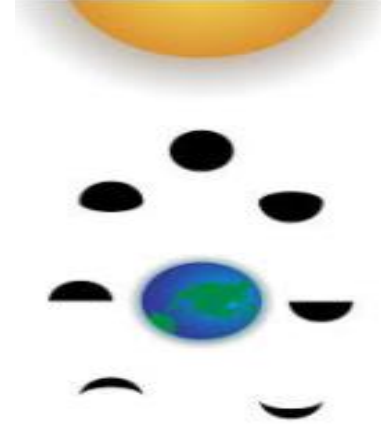
Moon Phases



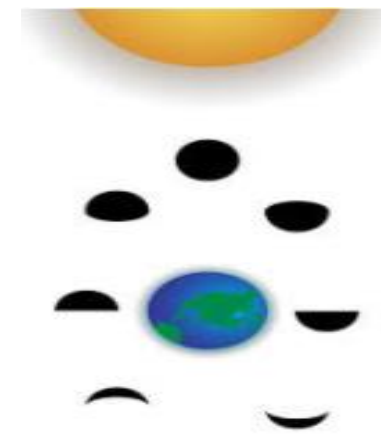
Moon Phases



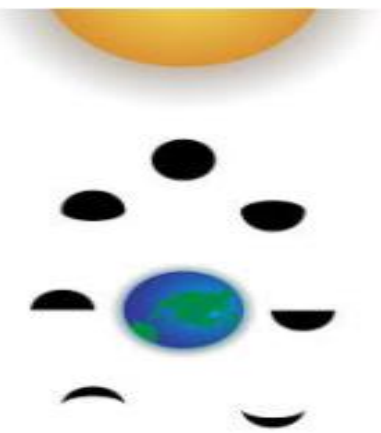
Moon Phases



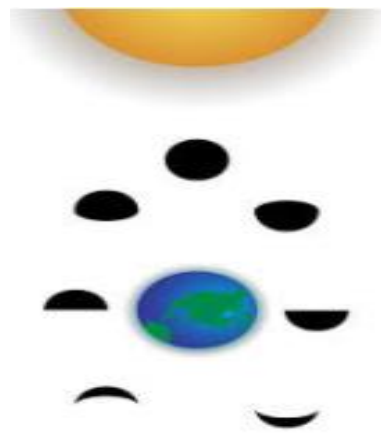
Moon Phases



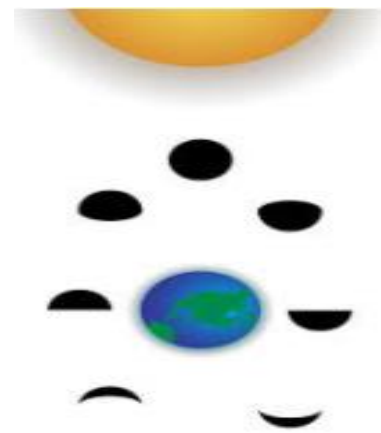
Moon Phases



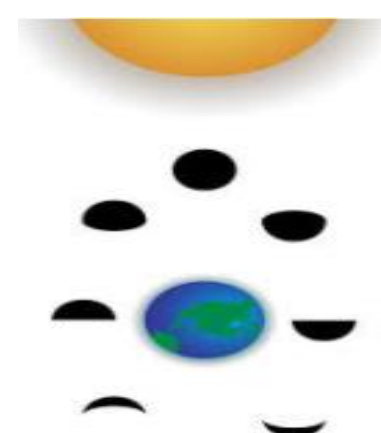
Moon Phases

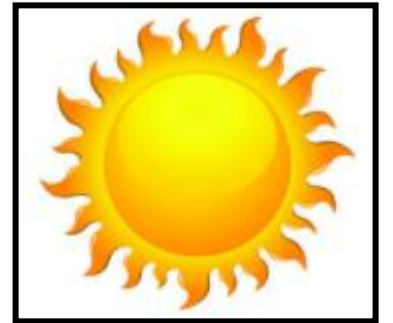


Moon Phases

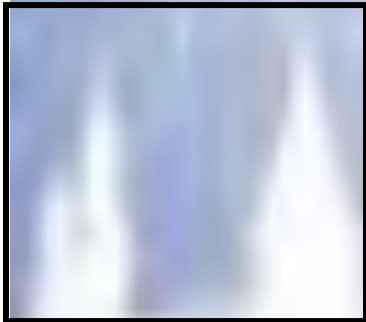
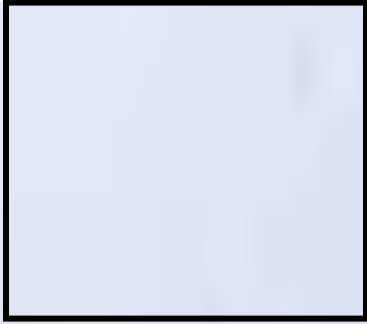
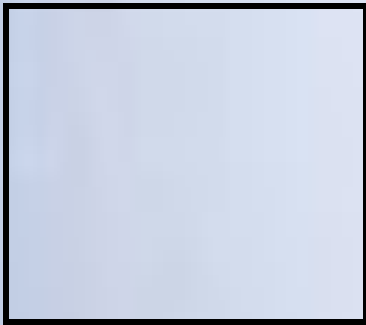


Moon Phases

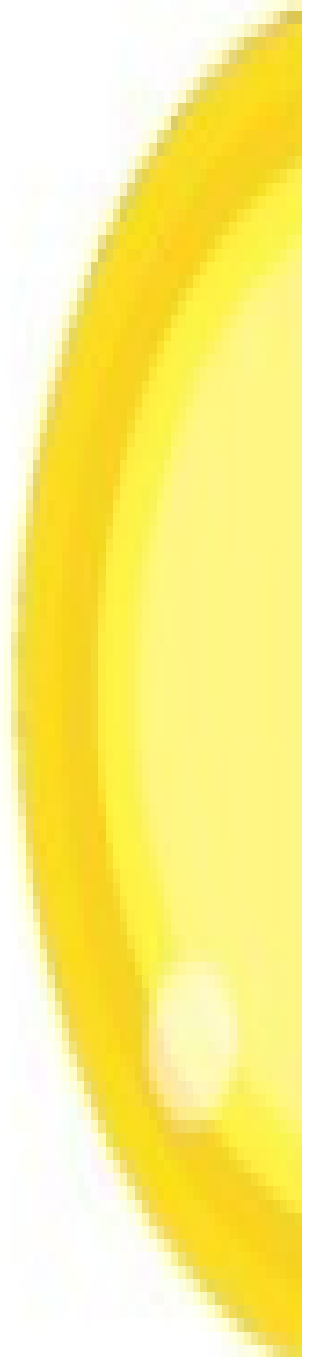
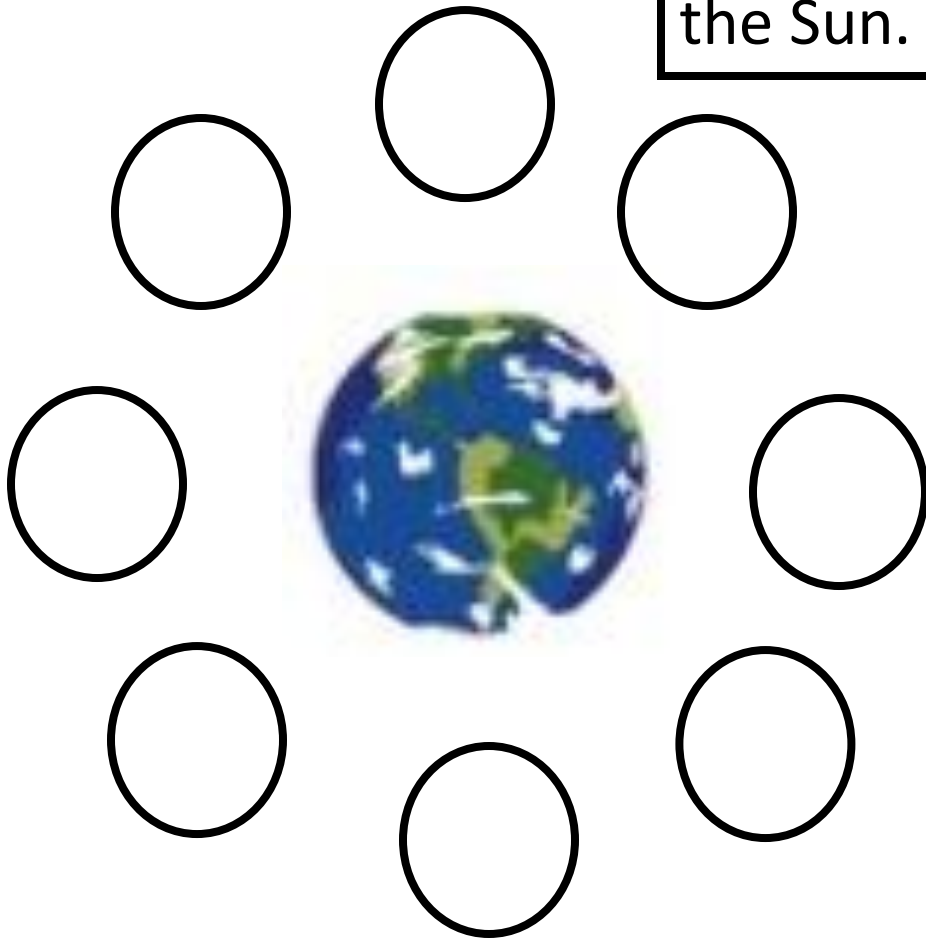




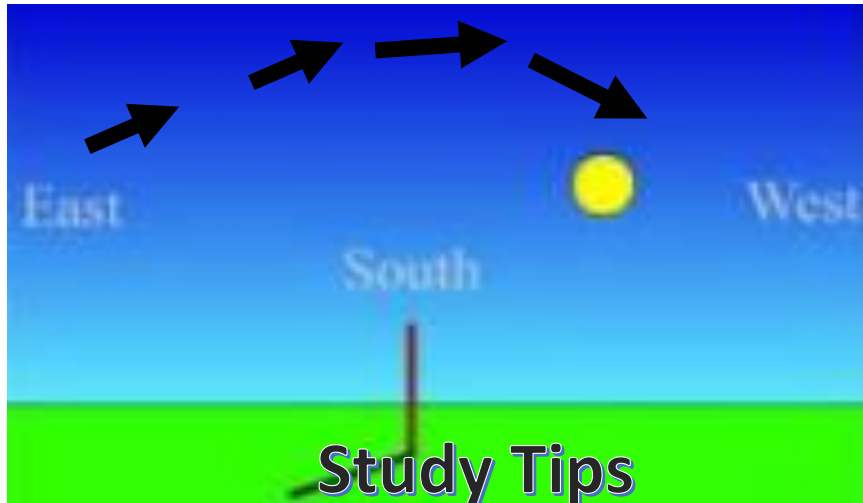
Place a picture of a light pole in this box. Then see if you can find the position of the sun that would have created that shadow direction and length.



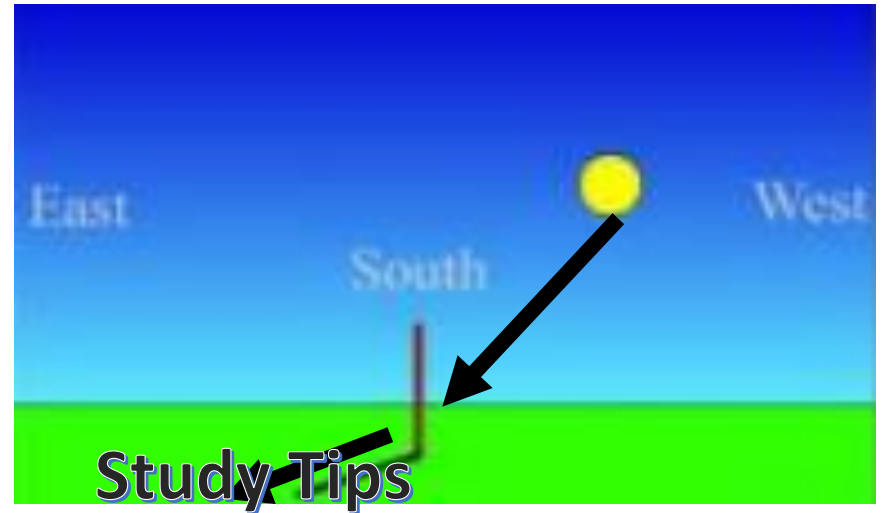
Color in the Moon Phases
based on the position of
the Sun.



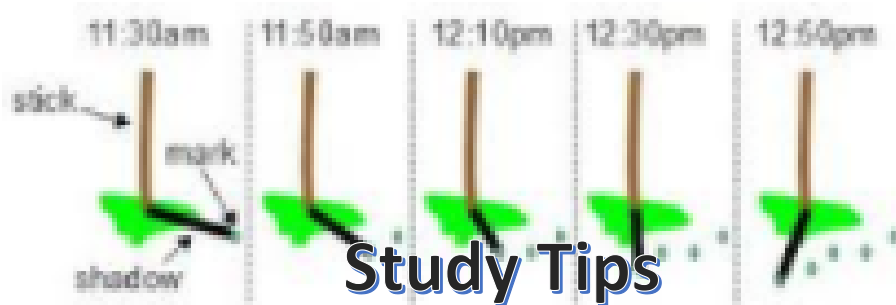
Remember that the Sun moves from the **East** to the **West**.



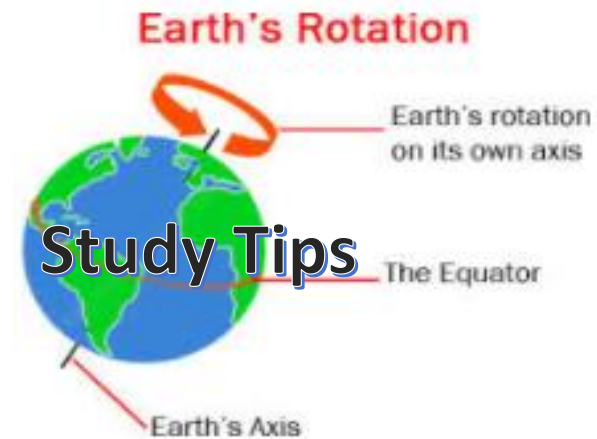
Remember that the position of the Sun determines the direction and length of the shadow.



Remember that at certain **times** the shadow changes based on the sun's position.

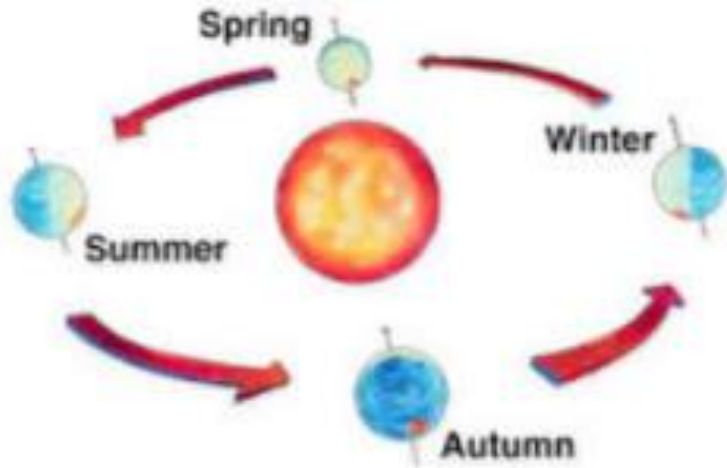


Remember that the Sun does not actually move around the Earth. It is in the center of our Solar System. The Earth spins on its axis and that makes it look like the sun is moving from our view, but it is not.

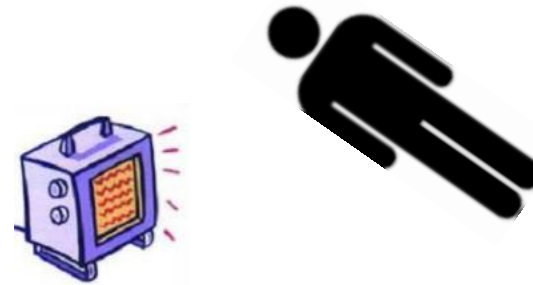




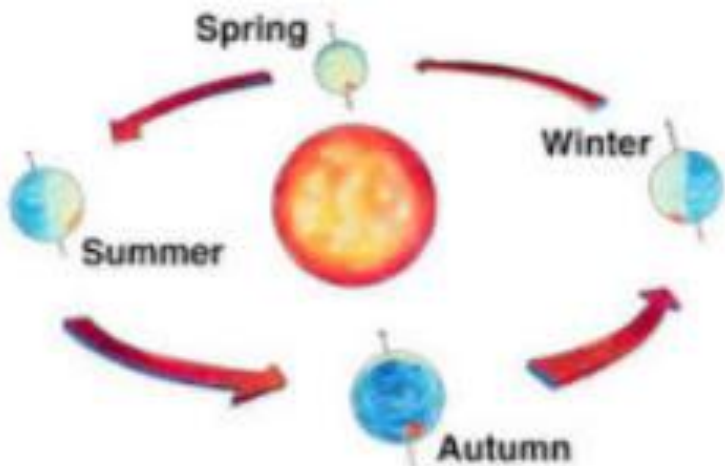
1. The earth is tilted on its axis as it moves around the sun.



2. Because the Earth is tilted toward the sun, it does not receive the same power from the sun's rays. This causes the Earth to have seasons. Imagine if you were leaning towards a heater. Your head would be much hotter than your feet.



3. We have four seasons that are created



4. Winter- the season between autumn and spring comprising in the northern hemisphere usually the months of December, January, and February. The colder part of the year.

Spring- is one of the four seasons and the transition from Winter into Summer and usually occurs during the months of March, April, May, This is when the plants lose their leaves.

Summer- the season between spring and autumn comprising in the northern hemisphere usually the months of June, July, and August. The warmer part of the year.

Fall- the **season** between summer and winter comprising in the northern hemisphere usually the months of September, October, and November