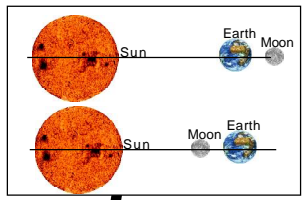
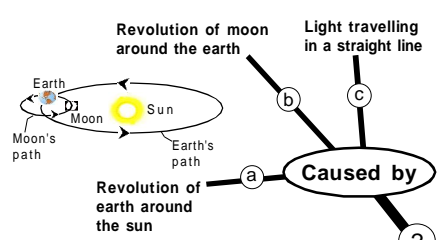


ECLIPSES (1/1)

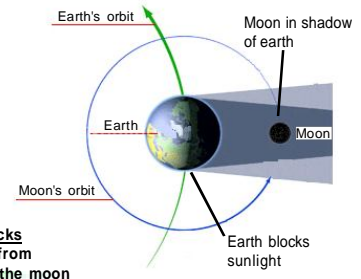
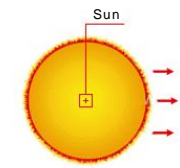
YEAR 6 UNIT 6

OCCURS WHEN THE EARTH, MOON AND SUN ARE POSITIONED IN A STRAIGHT LINE

Caused by



Occurs when earth is between the moon and the sun in a straight line



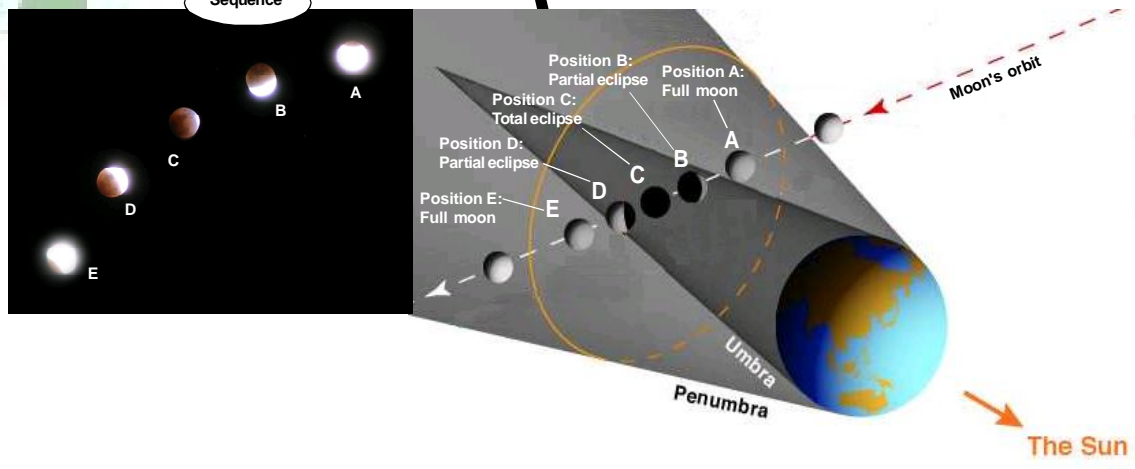
ECLIPSE OF THE MOON

- 1. Occurs only during the full moon
- 2. Earth blocks sunlight from reaching the moon
- 3. Earth's shadow falls on the moon
- 4. Seen with naked eye from side of earth experiencing night time
- 5. Earth has 2 shadow regions:
(1) Lighter shadow (Penumbra)
(2) Darker shadow (Umbra)



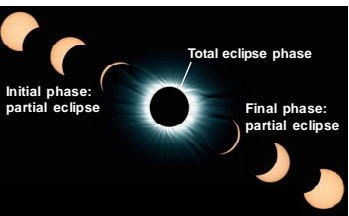
TOTAL AND PARTIAL ECLIPSE OF THE MOON

Sequence



TOTAL ECLIPSE OF THE SUN

- Sequence**
- 1. Initially sun is getting smaller because it is gradually being blocked by the moon. Sky becomes darker.
 - 2. Reaches total darkness during total eclipse for a few minutes or seconds.
 - 3. Later, sun becomes bigger, sky becomes brighter because the moon is gradually unblocking the sun.
- Scenario On Earth**
- 1. Stars are visible
 - 2. Eerie atmosphere
 - 3. Temperature falls slightly
 - 4. Animals' activities changes as if it were nighttime
 - 5. Do not look directly at the sun during the solar eclipse.
- Precaution**
- 1. Sun's bright rays can damage the eye permanently
 - 2. Use special glasses to look at solar eclipse or look at the image of the sun on water



Sun is partially obscured by the moon because they are not exactly aligned.



People at region B and C experience partial eclipse, not total darkness

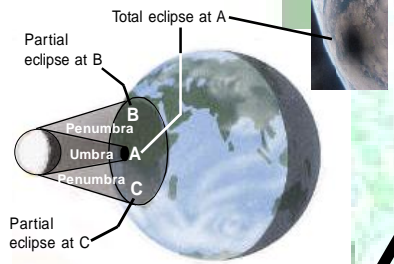
Bright ring (corona), is the part of sun not obscured by the moon. The dark circle is the moon blocking the sun



People in this region (A) experiences total darkness

ECLIPSE OF THE SUN

Occurs at the region where the dark umbra falls on the surface of the earth



Totally dark shadow (umbra) and a lighter shadow (penumbra) are formed when the moon blocks the sunlight from reaching the earth

Occurs only during the day

Occurs when moon is between the earth and the sun in a straight line

