

# LIGHT ENERGY

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- light is a form of energy that affects our eyes to produce the sensation of vision
- Shadow is a dark patch of the object
- Pin hole camera is a simpler application of the rectilinear propagation of light which was invented in the eleventh century by an Arabic scientist so as to see the solar eclipse without directly looking towards the sun.
- The three applications of rectilinear propagation of light are -
  - 1) - Pin hole camera
  - 2) - formation of shadows and
  - 3) - eclipses
- lunar eclipse is due to the formation of shadow of earth on moon which blocks the sunlight to reach the moon.
- Eclipses are examples of formation of shadows in nature. Eclipses are of 2 kinds
  - 1) - lunar eclipse
  - 2) - solar eclipse
- Solar eclipse occurs when a portion of the Earth is engulfed in a shadow cast by the moon which fully/partially blocks sunlight. This occurs when the Sun, Moon & Earth aligned. Such alignment

coincides with a new moon indicating the Moon is closest to the Ecliptic plane.

There are four types of Solar Eclipses. They are Total, partial annular & Hybrid. Total eclipses happen when the Sun is completely blocked by the Moon.