

## BYA Class 6

- Moon: month, Monday, tides, lunatic, lunar calendars, Islamic calendar,
- Appearance of Moon
  - Beautiful telescopic object
  - One face always towards Earth
  - Earth - geologically alive; Moon - geologically dead
  - Moon is small, cooled quickly after formation
  - Craters!
  - Time line, Lunar Highlands, Lunar Seas
    - Lunar Highlands: 4+ billion years old
    - Impact Basins:  $\approx$  3.9 billion years old
    - Lunar Seas (Maria):  $\approx$  3.8 to 3.1 billion years old
    - Young Craters: less than, say, 1 billion years old
- Lunar Characteristics
  - $\frac{1}{4}$  of the Earth's diameter
  - $\frac{1}{81}$  of the Earth's mass
  - $\frac{1}{6}$  Earth's gravity
  - No atmosphere, lost. (no wind-water erosion)
  - Little -No internal activity (lava, volcanoes, moon quakes, magnetic field)
- Appearance in Sky
  - Illumination
  - Limb, Terminator, Earthshine
  - Phases, Names, Identify
  - Time keeping
  - Rise and Set Times
  - Night to Night delay in rise time
  - Harvest Moon
- Astronomy on the Internet
  - Sky and Telescope Magazine (for advanced amateurs)
  - Astronomy Magazine (for beginners)
  - Mr. Bad Astronomer!
    - We never went to the Moon!
    - Stand an egg on end on March 21<sup>st</sup>!
  - Indiana Astronomical Society
  - Butler University Holcomb Planetarium
  - Children's Museum Planetarium:
  - Eclipses
  - International Dark Sky Association
  - **Google!**
  - etc.