

- Shape of the Moon changes in a predictable pattern over and over based on the Moon's orbit.
- The shapes are called phases.
- It takes 4 weeks for the Moon to go through all the phases. Called a Lunar Cycle.
- Primary & Intermediate phases are called:
  - > **New Moon** - not visible; the Moon is between the Earth and the Sun. The dark side of the moon is toward Earth, so we see nothing.
    - **Crescent Moon** - Moon is shaped like a smile; less than half
      - « **Waxing** comes after new Moon - means getting bigger-starts as a sliver gets bigger for 7 days
      - « **Waning** comes after full Moon - means getting smaller-starts as a quarter gets smaller for 7 days
  - > **First Quarter** - the right side of the Moon is lit, and the left side is dark. It rises at noon and sets at midnight.
    - **Gibbous Moon** - Moon is shaped like an oval
      - « **Waxing** comes after the first quarter - means getting rounder and rounder for 7 days
      - « **Waning** comes after full moon - means getting smaller and smaller
  - > **Full Moon**- when the entire side of the Moon facing Earth is lit up. We can see the whole side (disk) of the Moon. The full Moon comes up at sunset and goes down at sunrise.
  - > **Third Quarter** - the left side of the Moon is lit, and the right side is dark. It rises at midnight and sets at noon.