The Moon

★ = test question !!!

2/3/16

The Origin and History of the moon:

- We always see the same side of the moon.
- we never see the Dark side of the moon.

Properties of the moon:

★ Radius: 1/4 radius of Earth

★ mass: 1/80 mass of Earth

★ average Density: 3.3 g/cm^3

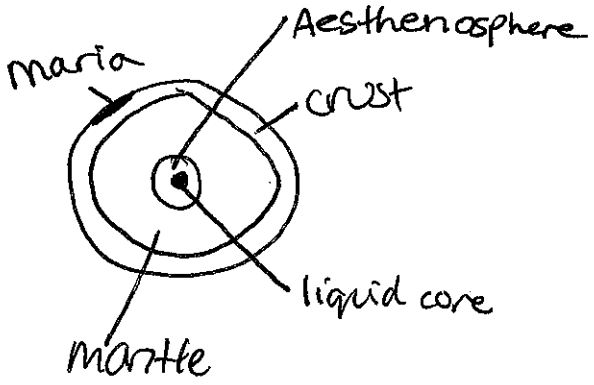
★ rotation: 27.3 days

Shape: 4km equatorial bulge

The Moon's Interior:

- some seismic evidence of liquid core
- no lunar magnetic field
- no active volcanos

The moon Drawing



Moon notes continued 2/9/16

Erosion Rates:

High crater density - old surface.

Lunar Surface Features:

- moon craters ~~that~~ were created billions of years ago by asteroid impacts.

☆ - For many craters you will see long, light streaks of pulverized rock called rays.

☆ - you can also see lunar canyons called rilles.

Maria

Large smooth dark areas on moon are called maria from the latin word for "seas"

- singular is mare.
- Mare Tranquilitatis is "sea of tranquility"

- "When the moon hits your eye like a big pizza pie thats amore....
- when you see a big dark eye on the moon in the sky, thats a mare.
- 17% of moon is covered in Maria.

The Dark Side of the Moon

- No maria on the dark side of the moon.

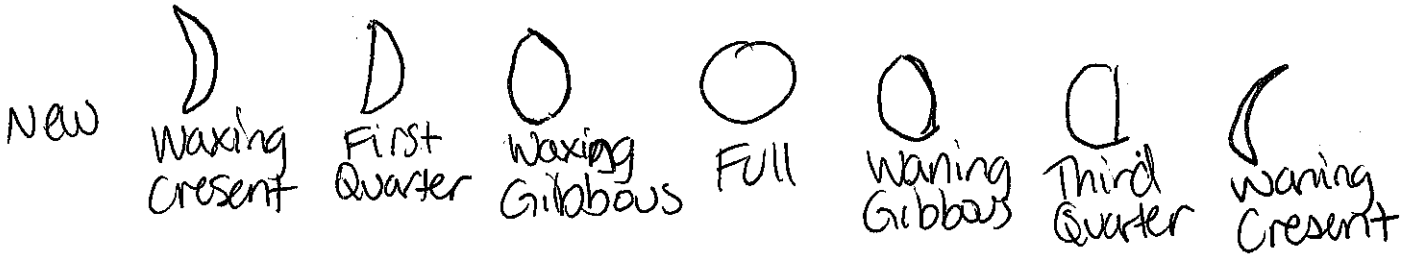
Phases of the Moon

Wax On → right to left

Wane off → right to left.

- caused by position of the Earth, the moon, & Sun.
- phases have nothing to do with Earth's shadow.
- plane of Moon's orbit almost the same as plane of Earth's orbit (5° tilt)
- "moon" light is actually reflected sunlight.

Phases of the moon: 29.5 days



The moon's different periods:

- The moon goes around the Earth once in 27.3 days ✱- rotates & revolves once.
  - "sideral period"

- The moon goes through one cycle of phases in 29.5 days. ✱-to go from New Moon to New moon.
  - "synodic period"

- Orbit of the moon almost lies in same plane as Earth's orbit around the sun.
  - plane is tilted by about 5°