**Jupiter Notes 3/31/15**

Jupiter is LARGE!

2 ½ times larger than all of the other planets combined.

If it were 80 times larger it would be a star

1000 times larger than Earth.

Jupiter is 11 earths across

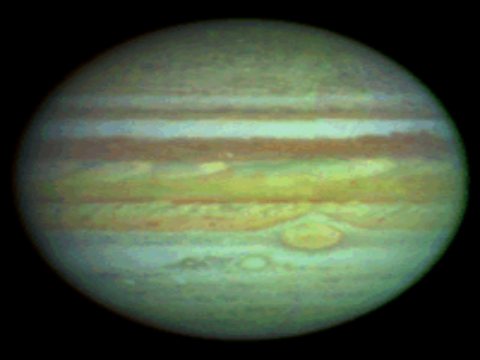
The diameter is 11x Earth’s diameter.

Atmosphere:

90% Hydrogen

10% Helium

* Huge gravity holds the light elements from escaping
* Hydrogen exists in all three of its states (solid, liquid, and gas)



Density:

1.3 g/cm3

Distance:

5 A.U.s away from the sun

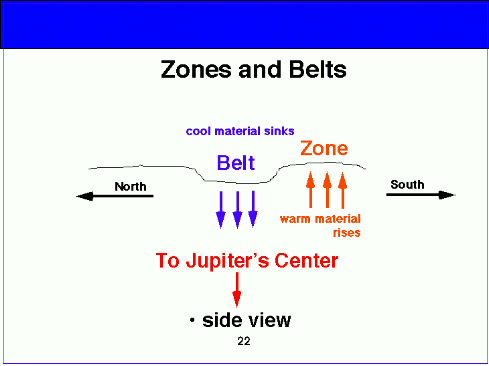
Surface Features:

\*\*TEST\*\*BELTS AND ZONES:

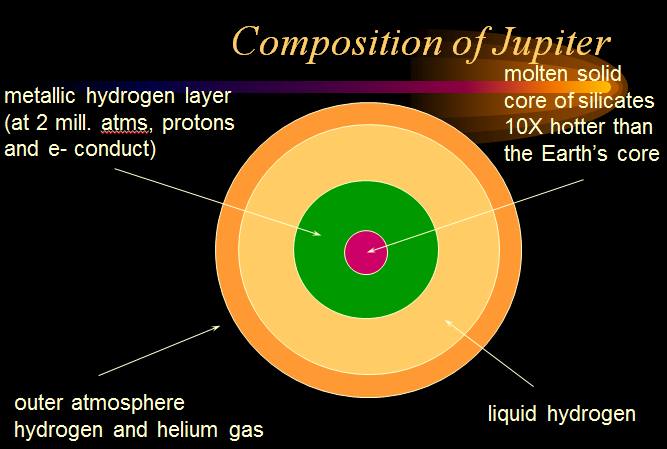
Belts are reddish colored

Zones are light-colored

Drawing: colored.



Composition of Jupiter:



9.8 hours for one rotation of Jupiter (really really quick)

11.94 years – 1 revolution

Has a HUGE magnetic field

Temperature:

125K

Jupiter’s Heat:

Not the greenhouse effect

More energy is leaving Jupiter than arrives

Jupiter has an internal heat source

Jupiters magnetosphere:

Extends over 5 AUs

20,000 times stronger than Earth’s magnetic field

Jupiter is named after the god Zeus

Jupiter’s moons are named after people Jupiter arm wrestled with.

Jupiter has rings:

very small particles.

...The rings are smaller than Saturn’s

…...because Jupiter is closer to the Sun and most particles have shrunk or melted.

THIN ICE RING

Probes:

Pioneer 10

Pioneer 11

Voyager 1

Voyager 2

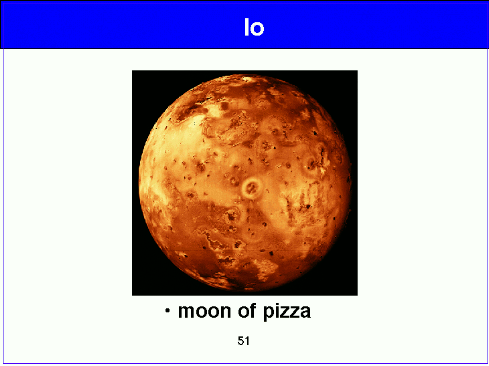
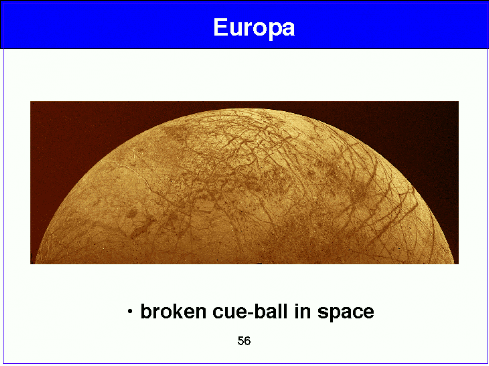
Juno

Galileo

Satellites:

Jupiter has 16 main moons, 50 small moons

4 you need to know:

* + **Io, Europa, Ganymede and Callisto**
  + **Io-** (pizza moon) It is the hottest moon in our solar system.
    - Smelliest moon because of the sulfur volcanoes
    - Still geologically active.
  + Draw: 
  + **Europa:**
    - few craters
    - frozen Water Ice
      * possible water ocean under the ice
    - Draw: 
  + **Ganymede: -- largest moon in the solar system**
    - Similar structure to Earth’s moon
    - Water on Ganymede replaces lava on moon
    - Frozen maria covers much of the landscape
    - Draw: ****
  + **Callisto : Farthest of the Galilean moons from Jupiter**
    - Similar to Ganymede
    - More craters and fewer faults
    - Valhalla impact basin
    - Draw: