**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: