

Astronomy 100, Fall 2006

Name:

Weekly assignment 5: Planets and other non-luminous solar system stuff
Due: November 2, 2006

Compare and contrast:

Perihelion vs. aphelion

Terrestrial planet vs. gas giant

Venus's atmosphere vs. Earth's atmosphere vs. Mars's atmosphere

Jupiter's internal heat source vs. Saturn's internal heat source

Axial inclination vs. orbital inclination

Cometary coma vs. cometary nucleus

Long-period comet vs. short-period comet

Apollo asteroid vs. Aten asteroid

C-type asteroid vs. S-type asteroid

Big Bang vs. solar nebula

If there is no solid surface to a gas giant, just what does the planetary diameter of a gas giant measure?

How can **impact craters** be used to figure out the age of a planetary surface?

Does every planet have a **magnetosphere**? Name one (besides the Earth) that does. How do we detect another planet's magnetosphere?

How are the following manifestations of the **second law of thermodynamics**?

Plate tectonics

Planetary ring particles dispersing

Nothing to sketch in the sky this week, but if you want to find Uranus, it is in the constellation Aquarius. Go out at about 8 p.m. and look in the southern sky; Aquarius will be a relatively dim constellation about 30° to 40° altitude due south. Uranus is a sixth-magnitude "star" in the constellation, very close to another actual star. You will probably need binoculars to see this.