

Astronomy 100, Fall 2005

Name:

Weekly assignment 7: Planets and other non-luminous solar system stuff
Due: November 14, 2005 at 6 p.m.

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

"Useful" energy turning into "useless" energy

In or around Friday, November 11, go out in the evening (if clear) or use The Sky or a website (if not clear) and look at the western sky. Locate Venus and a constellation sometimes called the **Teapot**. Sketch them both (give the proper name of the Teapot) and give the usual orientation and time/date of observation.