

The Solar System – Study Guide

Things you should know:

- For every object at the right, you should know its name and where it is in the Solar System. For the moons, you should have some idea of the size (large, medium, or small)
- For every object that is underlined, you should be able to give me considerable more facts about it. For example, you should know how thick the atmosphere is (if it has one), and its order compared to other underlined objects. For example, you have to know Jupiter's satellites in order.
- For every object that is in **bold face**, you should be able to recognize it. For example, I could show you a picture of Europa and ask you to distinguish it from any of the other objects in the list.

Other things to think about:

- Which are the terrestrial planets? Which are the gas giants?
- Which planets do not have atmospheres? Which are thicker or thinner than Earth's atmospheres?
- Which planets have rings?
- You can estimate the temperature on any of these objects simply by its distance from the Sun. For a few of these objects, this will give you a significant underestimate of the temperature. Which ones, and why?
- Which objects show evidence of geologic activity (volcanism, for example)? What is the ultimate source of energy for these activities? It is different for some objects than for others!
- Which objects have old surfaces? Which have young? Why? How can we tell? For which objects can't we see the surfaces?
- What do we know about the composition of the various objects in the Solar System?
- For extrasolar planets: Focus on the two most productive methods for finding extrasolar planets (radial velocity and transit methods)

Mercury

Venus

Earth

Moon

Mars

Phobos

Deimos

Asteroids

Ceres

Jupiter

Io

Europa

Ganymede

Callisto

Saturn

Titan

Iapetus

Enceladus

Uranus

Miranda

Neptune

Triton

Kuiper Belt

Pluto

Charon

Eris

Comets

Halley

Oort Cloud

There are no equations for test 2.