

Name: _____

ERTH 1 – Planets
Instructor – Memorie Yasuda
Assigned – April 6, 2007
Due – April 13, 2007

Homework 1 – The Solar System (100 points total)

- Essays must be typed, double-spaced, and printed.
- All papers must be stapled together. Name on front with initials at top right-hand side of each page.
- You will need to use the following resources as you see fit:
 1. Resources on the Web (you may want to look at the posted websites for ideas first, although you will need to look beyond that)
 2. Your textbook and any other printed materials you want to use.
 3. Notes
- You are encouraged to confer with other students, but individual answers must be original, i.e. crafted and written by individuals. No credit will be given for unusually similar responses.
- Homework is due at the start of class. No late work accepted.

A. Formation of the Solar System (30 points)

Explain in one hundred words or less, how a solar system forms. The more significant points you cover, the more points you get. But the answer must be written in complete sentences, and it must be scientifically accurate and grammatically correct. You must use your judgment in prioritizing what's significant.

B. Is the Earth close or far from the Sun during winter? (10 points)

State your answer AND provide illustrations (include web addresses) that support your answer. Your grade on this question will partly depend on how much confidence the TAs have in your source of information. Again, you must use your judgment in evaluating sources of information.

C. Are there any planets visible in the night sky this week? (10 points) (Between April 6 and April 13?)

List the planets if any and cite the source of your answer.
Give the name and URL of your favorite online sky chart or viewer.
(Check out the CD to your textbook too.)

D. Explain why astrophysicists often like to consider that people are made of "stardust." (10 points)

Explain in one hundred words or less.

E. Why do YOU think that the Earth revolves around the Sun, rather than the other way around? (30 points)

F. Identify the most significant new observations, ideas or inventions that were conceived by each of the following individuals. (10 points)

1. Copernicus
2. Kepler
3. Galileo

Make sure to explain how each individual's contribution changed previous thinking.