

Astronomy 230 Fall 2006

Homework #6

Due in Class: Friday, Oct. 19

Note: This homework should be typed. Your response should be weighted with the number of points assigned.

1. (10 points) Choose a planet or moon in our solar system. Generally discuss the object (i.e. structure, atmosphere, availability of solvents, etc.).
2. (25 points) If life exists on that planet or moon, how would it function and where might it live? Explain your answers.
3. (20 points) How would you design a space mission to detect that organism?
4. (20 points) Would you expect that organism to use DNA/RNA and proteins? Explain.
5. (25 points) Imagine an advanced civilization on another planet (in another solar system). Compare possible life in the Solar System and life on Earth to that planet. What similarities or differences would you expect?