

Astronomy 330 Fall 2007

Homework #7

Due in Class: Friday, Oct. 25

Note: This homework should be typed.

For each question, use facts from lecture to develop reasonable answers.

1. Choose a planet or moon in our solar system. Generally discuss the object (i.e. structure, atmosphere, availability of solvents, etc.).
2. If life exists on that planet or moon, how might it function and where might it live? Explain your answers.
3. How would you design a space mission to detect that organism?
4. Would you expect that organism to use DNA/RNA and proteins? Explain.
5. A planet far, far away has evolved intelligent life. Describe this hypothetical planet.
6. Compare possible life in the Solar System and life on Earth to that planet. What similarities or differences would you expect?
7. Discuss a possible path to intelligence. What are some problems and advantages?
8. Will this intelligent life look like us? Why or why not?