

Due at the start of lecture on Monday, 1 February 2010

Chapter 1: Defining Life --

- 1) Give a working definition for exactly what is *life* that is different from that given in the text. Explain how it is different from the text's definition and in what ways it is better and in what ways it is not as useful.
- 2) The text's suggested working definition for *life* is admitted to fail in circumstances. Describe the properties of two "organisms" that can convincingly be argued to be alive, yet fail to meet all the criteria for life that you have proposed in your response to the above question.
- 3) Stating the most important components, their composition and their role, describe the structure of a simple cell. Provide a clear and concise response to the question: ***Is a simple cell alive?***
- 4) Use your definition for life as proposed in response to the first question as well as specific facts gleaned from the Internet and any other resources to provide to clearly and concisely respond to the question: ***Is a Prion alive?***
- 5) Name the four main classes of organic molecules found in living systems. Describe their chemical structures and explain their main roles.