

Submit via e-mail (gelderman@wku.edu), due 12:40 on Wednesday, 3 March 2010

**Chapter 2: Habitable Worlds --**

- 1) Use the text, the Internet, and any other resources to completely but concisely discuss which one of the following possible sources of energy was the largest energy source supplied to the early Earth – a) radiation from the Sun; b) shock waves from meteorites; c) lightning; d) radioactivity; e) volcanoes; and f) cosmic rays.
- 2) If the Sun was replaced by a star 500 times more luminous, then at what distance would the Earth have to orbit that star in order to maintain its present effective temperature?
- 3) Use the text, the Internet, and any other resources to completely but concisely discuss how the role of carbon sinks and sources helps to create a Mars that is presently too cold to sustain life.
- 4) Question 2.8, page 76, from Gilmour and Sephton.
- 5) Question 2.5, page 71, from Gilmour and Sephton.