

## **CSM Biology 130 Online**

### **Week 1 Guided Reading Questions and Activities**

Welcome to your first set of guided reading questions. These questions are designed to help you generate a set of notes that you will use to study for the quiz that is next week. I recommend that you have a notebook, just as you would for an onsite class. In that notebook, you take notes from your reading. Each week you will have assigned reading from the Johnson text with guided reading questions. The reading may be a whole chapter, or sections within a chapter. The specific reading assignment will be listed at the top of the Guided Reading Questions page.

You should use this assigned reading list as an outline for your notes you take while reading. The questions will further direct your attention to specific areas to study, and take notes on. You do NOT need to turn in these answers/notes unless asked. To make these notes most useful to you, you should put these notes/answers in your own words, as if you were going to explain them to yourself. If you have any questions about the content of what you are studying, or how to study, please feel free to email me (always put Biol 130 in the subject line).

In addition, there are web based activities and other assignments on the [humanbiology.com](http://humanbiology.com) site and on the [WebAccess](#) site that are required. You must do these activities each week, but only a few will be marked as required to turn in for credit.

### **Chapter 1 Human Biology, Science and Society**

Read all sections

#### 1.1 Characteristics of Life

- a. List, in your own words, the 7 characteristics of life. Keywords to be able to define include: biology, science, elements, molecules, metabolism, cells, unicellular, multicellular, homeostasis, external environment, internal environment, DNA, evolution. See the **See For Yourself Signs of Life** tutorial and the quiz questions below it from the humanbiology.com website to get a better sense of these characteristics.

#### 1.2 How humans fit into the natural world

- a. Explain how humans fit into the scheme of living things. What is our kingdom, and the subclassifications of that kingdom that we fit into, including genus and species.
- b. List the 4 main features that make us unique from other animals and organisms.
- c. What are the levels of a human body's organization? The smallest living unit of our body's is the cell, what comes after that? Keywords to define include cell, tissue, organ, organ system, organism, population, community, ecosystem, biosphere. Use Figure 1.7 to visualize the levels of organization.

#### 1.3 Science is both a body of knowledge and a process

- a. Explain what is meant by science and scientific method. How do scientists use scientific method to support their hypothesis? Outline or draw the steps in the

method. Define the following terms with respect to the scientific method: observe, hypothesis, experiment, control group, experimental group, placebo, blind experiments, peer-reviewed journals, theory. Click on [See For Yourself Scientific Method](#) activity. This will give you an example of scientific method in action looking at the lemon ant plant.

#### 1.4 Sources of scientific information vary in style and quality

- a. Explain the difference between a peer-reviewed journal article and one from another source like a science magazine or a general interest newspaper. Why should you be skeptical of information from the World Wide Web?

#### 1.5 Learn to be a critical thinker

- a. What questions should you ask when presented with information claiming something is true?
- b. Learn how to read or interpret a line graph, scatter plot, and a bar graph.
- c. Explain the difference between anecdotal evidence and scientific evidence.

#### 1.6 The role of science in society

- a. How has science impacted your life? Think of some examples.

#### Assignments:

1. Post your introduction to the forum/discussion. (5pts)
2. Edit your profile and include a picture.
3. Take the practice quiz – available this week only (5pts)
4. Begin your weekly practice of finding a science article written about human biology. Use the guidelines in section 1.5 and the *Try It Yourself* Box to evaluate the claim. This article and your summary of the claim and the acceptability of the evidence is due by the end of the week. There is an example on the WebAccess page. (5pts)