

Numerous study questions and activities are provided in the “End of the Chapter” sections of the textbook and the “Student Study Guide” that accompanies the textbook. Listed questions below are questions that can be answered from the course lectures and readings. Answering these does not directly guaranty success on the exam. Nevertheless, completing these exercises may assist in developing thinking skills in biology, which more directly affects performance on exams.

## **CHAPTER 1: HUMAN PERSPECTIVE**

### **End of the Chapter Study Aids (p. 13)**

*Studying the Concepts:* 1, 2, 3, 4, 5, 7,

*Understanding Key Terms:* all except control group

*Testing Your Knowledge of the Concepts:* 1, 2, 4, 5, 6, 8, 9, 10

### **Student Study Guide (p.1)**

*Study Questions:* 1-5, 7, & 8-15

*Definitions Crossword:* all

*Chapter Test:* 1-3, 5-11, & 14-15.

## **CHAPTER 2: CHEMISTRY OF LIFE**

### **End of the Chapter Study Aids (p. 39)**

*Studying the Concepts:* 1, 5-16

*Testing Your Knowledge of the Concepts:* All

*Understanding Key Terms:* All except: calorie, emulsification,

### **Student Study Guide (p. 6)**

All questions on pages 6-14 **except:** 41 and 44

### **Some of my own questions:**

1. Why is water considered the universal solvent for polar molecules?
2. Why is life “carbon-based?” Why not silicon?
3. Compare and contrast starch, cellulose, and glycogen.
4. Compare and contrast triglycerides and phospholipids
5. Name some of the different functions that proteins perform. Why do proteins carry out so many different function in the body?
6. Why is it important to balance the pH of the body fluids?
7. Compare and contrast DNA and RNA.
8. Why is ATP the energy carrier of the cell?

## **CHAPTER 23: HUMAN EVOLUTION**

### **End of the Chapter Study Aids (p. 475)**

*Studying the Concepts:* 5-9, & 11-12

*Testing Your Knowledge of the Concepts:* 5, 7, & 9-16

*Understanding Key Terms:* adaptation, australopithecine, biological evolution, bipedalism, Cro-magnon, culture, evolutionary (phylogenetic) tree, fossil, heterotroph, hominid, Homo erectus, Homo habilis, Homo sapiens, lineage, multiregional continuity hypothesis, natural selection, Neanderthal, out-of-Africa hypothesis, primate

### **Student Study Guide (p. 192)**

*Study Questions:* 6-17

*Definitions Wordsearch:* all

*Chapter Test:* 1, 3-6, 9, 10, 15-19, 21-23

## **CHAPTER 24: ECOSYSTEMS AND HUMAN INTERFERENCE**

### **End of the Chapter Study Aids (p. 494):**

*Studying the Concepts:* 2-6, 8, 9

*Testing Your Knowledge of the Concepts:* 1-6, 10-12

*Understanding Key Terms:* autotroph, biogeochemical cycle, bioaccumulation, carbon cycle, carnivore, community, consumer, decomposer, detrital food web, detritus, ecological pyramid, food web, global warming, grazing food web, greenhouse effect, greenhouse gases, habitat, herbivore, heterotroph, omnivore, population, precipitation, producer, trophic level, water (hydrologic) cycle

### **Student Study Guide (p. 201):**

*Study Questions:* 4-11, & 14-17

*Definitions wordsearch:* carnivore, consumer, ecosystem, food chain, food web

*Chapter Test:* 5-15, & 22-23

## **CHAPTER 25: CONSERVATION OF BIODIVERSITY**

### **End of the Chapter Study Aids (p. 512):**

*Studying the Concepts:* 2-7, & 11

*Testing Your Knowledge of the Concepts:* 1-10

*Understanding Key Terms:* alien (invader) species, biodiversity, conservation biology, keystone species, pollution, restoration ecology,

**Student Study Guide (p. 212):**

*Study Questions:* 1-5, 7-21, & 26

*Definitions Wordsearch:* alien (invader, exotic) species, pollution

*Chapter Test:* 1, 3-10, 13, 15, 16, 19-21, 23, & 25