1. What is the currency of the cell? Where is it made in the cell?

2. Draw a diagram of how the different foods that we eat can be turned into energy for the cell (see Figure 6.13)

3. Using glucose as a model food source, what is the overall equation for cellular respiration? Label the reactants and products.

4. What is the role of oxygen in cellular respiration?

5. Draw a mitochondrion and label its parts.
6. What are the 3 stages of cellular respiration? What are the inputs and the outputs for each stage? Draw a diagram and/or fill out a table to help you remember.

7. How does lactic acid fermentation differ from alcohol fermentation? What organisms carry out lactic acid fermentation? What organisms carry out alcohol fermentation?
8. What organelle in a plant carries out photosynthesis? Where did you see these organelles in an Elodea cell?

9. What is the name of the pigment that harvests light energy in the plant? Specifically, what colors of light are absorbed by this pigment? Why are leaves green?

10. What is the overall equation for photosynthesis? Label the reactants and products.

11. What is the role of water in photosynthesis?

12. Where do the carbon atoms that make up all of the carbon-based molecules in a plant come from?

13. Draw a chloroplast and label its parts.
14. Draw a diagram of the light reactions to help you understand how light energy is converted to chemical energy (See Figures 7.11 and 7.13).

15. Draw a diagram of the Calvin cycle to understand how sugar is made from carbon dioxide. Label the inputs and the outputs (See Figure 7.14).

16. Briefly explain the differences between C3, C4, and CAM plants.

17. Review the greenhouse effect.