**(Section 2.1)**

Answers to Section Review

1. Stimulus

2. Cells

3. a

4. Sample answer:

In asexual reproduction, there is one parent, and the offspring are identical to the parent. In sexual reproduction, there are two parents, and offspring share the characteristics of both parents.

5. Sample answer: Organisms are made of cells, detect and respond to stimuli, reproduce, have DNA, use energy, and grow and develop.

6. 32 bacteria first generation: 1 second generation 2 third generation 4 fourth generation 8 fifth generation 16 sixth generation 32

7. Sample answer: I sweat or shiver to maintain a constant body temperature. I go inside or put on a coat if I get cold. I squint my eyes when the sun is too bright.

8. Sample answer: The fur coat of a bear helps keep the bear’s body warm during cold weather. By keeping the bear warm, the coat helps the bear maintain homeostasis.

**(Section 2.2)**

Answers to Section Review

1. Sample answer: Producers can make their own food. Consumers must eat other organisms to get food.

2. Sample answer: A phospholipid contains phosphorous and forms cell membranes.

3. b

4. Sample answer: Most of the chemical reactions involved in metabolism require water. Most living things need oxygen from air to release energy from food. Plants and other organ- isms need carbon dioxide from air to make food. Food gives organisms the energy they need to carry out life processes. Organisms need a place to live that contains the things they need to survive.

5. Sample answer: Proteins contain amino acids, which are used to build other proteins. Carbohydrates provide energy. Lipids are energy-storage molecules and form cell membranes.

6. Sample answer: Decomposers cannot make their own food, as producers can, so decomposers consume dead organisms.

7. Amino acids

8. 660 \_ 11 \_ 60 times

9. Sample answer: Green plants, algae, and some bacteria need carbon dioxide gas as well as oxygen. Without the carbon dioxide, these organ- isms could not survive, and other organisms could not rely on them as a food source.

10. Sample answer: A cave pro- vides shelter. An ant could be food. A lake provides water.

11. Sample answer: The supply of ATP would decrease. A decrease in ATP would cause a cell to have less energy than it needs to carry out its activities. Your body would have to get ATP from other sources, such as lipids.

12. Sample answer: They are all equally important. An organism could not survive without any one resource.