

Lesson Outline**LESSON 1*****Classifying Living Things*****A. What are living things?**

1. All _____ have some characteristics in common.
 - a. They are made of _____.
 - b. They are _____ into different structures.
 - c. They _____ and develop.
 - d. They _____ to their environment.
 - e. They _____, or form new organisms.
 - f. They use _____.
2. _____ in cells are organized into different structures that help cells function.
3. The four types of macromolecules in cells are nucleic _____, lipids, proteins, and _____.
4. _____ organisms are made up of only one cell.
5. Multicellular organisms have different types of cells that carry out specialized _____.
6. The different levels of organization in multicellular organisms are: cell, _____, organ, and organ system.
7. Living things grow, or increase in _____, during their lifetimes.
8. Adult organisms form new organisms by _____ asexually or sexually.
 - a. Bacteria and other _____ organisms reproduce asexually when one cell divides and forms two new organisms.
 - b. Sexual reproduction occurs when the _____ cells of one or two parent organisms join and form a new organism.
 - c. Humans and other multicellular organisms reproduce _____.
9. _____ are organisms that convert light energy into usable energy.
 - a. Many autotrophs use energy from light to convert carbon dioxide and _____ into carbohydrates, or sugars.
 - b. Organisms that grow on energy released by chemical reactions of inorganic substances such as sulfur and ammonia are called _____.

Lesson Outline continued

10. Organisms that obtain energy from other organisms are called _____; they eat autotrophs or other _____.
 11. Organisms respond and adapt to changes in their external _____.
- B. What do living things need?**
1. All living things need energy, food, _____, and a place to live.
 2. An organism's _____ is the specific environment where it lives.
 3. _____ provides organisms with energy, and _____ is essential for survival.
 4. The type of _____ an organism eats depends on its habitat.
- C. How are living things classified?**
1. Classifying living things makes it easier to _____ organisms and to see how they are _____ and different.
 2. The naming system that gives each living thing a two-word scientific name is called _____ and was created by _____.
 3. _____ is the branch of science that classifies living things.
 4. A(n) _____ is a group of organisms.
 5. All living things on Earth are divided into three groups called _____.
 - a. Domains are divided into _____ and then phyla, classes, _____, families, genera, and _____.
 - b. A(n) _____ is made of all organisms that can mate with one another and produce _____ that can reproduce.
 6. Scientists today group organisms based on similarities such as how organisms reproduce, how they process _____, and the types of genes they have.
 7. A(n) _____ is a tool used to identify an organism based on its characteristics.