

Lesson Outline**LESSON 2****Levels of Organization****A. Life's Organization**

1. A large animal is composed of trillions of tiny _____ working together.
2. _____ organisms are made of only one cell.

B. Unicellular Organisms

1. Unicellular organisms are _____ or prokaryotes.
2. A cell without a membrane-bound nucleus is a(n) _____ cell.
3. A(n) _____ cell has a nucleus surrounded by a membrane and many other specialized organelles.

C. Multicellular Organisms

1. Each type of cell in a multicellular organism has a specific job that is important to the _____ of the organism.
2. Cells become different types during _____.
 - a. Nearly all the cells in an organism have identical _____.
 - b. Different types of cells use _____ of the chromosome.
3. _____ are unspecialized cells that can develop into many different cell types.
4. Stem cells can produce new muscle cells when _____ are torn.
5. In plants, unspecialized cells similar to animal stem cells are grouped in areas called _____.
6. _____ are groups of similar types of cells that work together to carry out specific tasks.
 - a. Most animals have four main types of tissue—muscle, epithelial, nervous, and _____.
 - b. The three main types of plant tissue are dermal, _____, and ground tissue.
7. _____ jobs in organisms require more than one type of tissue.
8. _____ are groups of different tissues working together to perform a particular job. The leaf is a(n) _____ that specializes in photosynthesis.

Lesson Outline continued

9. _____ are groups of different organs that work together to complete a series of tasks.
 - a. One human organ system, the _____, includes the stomach and intestines.
 - b. Plants have two major organ systems—the shoot system and the _____ system.
 - c. _____ organisms usually have many organ systems.
 - d. Each organ system _____ on the others and cannot work alone.