

CHAPTER 2

1. All living things: Are composed of one or more cells. Contain DNA. Reproduce either sexually, asexually, or both. Are both complex and highly organized. Have a way to sense and respond to changes in their environment. Have a way to extract energy from their surroundings. Have a way to maintain homeostasis.
2. A unicellular organism is composed of one cell. A multicellular organism is composed of two or more cells
3. DNA contains the information that every cell and every organism needs in order to function, live, and reproduce properly.
4. There are many levels of complexity and organization displayed by living organisms. Organisms are structurally and biochemically complex and organized, controlled by their highly organized and complex DNA. The interactions of organisms with one another and their environment also displays this property.
5.
 - a. a group of tissues with a common function
 - b. a group of different types of cells with a common function
 - c. the smallest functional unit of life
 - d. a group of organs functioning to keep the organism alive and maintaining homeostasis
6. A receptor is a structure that senses changes in an organism's environment.
7. Photosynthesis is the process by which plants convert the sun's energy into food that they can use. Photosynthesis is important for a number of reasons: It is the main way that the oxygen in our air is replenished. It is the starting point for all energy on earth.
8. **An herbivore's food source is plants. A carnivore's food source is other consumers/animals.**
9. Cellular respiration is the process by which cells convert the food that they eat or make, into usable energy for the cell or the organism.
10. The maintenance of a stable environment inside of an organism or cell is called homeostasis.
11. Taxonomy is the scientific process for classifying all species or all organisms into groups.
12. All organisms require: food, a habitat, water
Almost all organisms require: food, a habitat, water, oxygen
13. False.