



Note-taking Worksheet

Cells—The Units of Life

Section 1 The World of Cells

- A. _____ help living creatures with activities of life such as movement, growth, and reproduction.
- The _____ was developed after Robert Hooke invented the microscope in 1665.
 - All _____ things are made of one or more cells.
 - The cell is the _____ of life.
 - All cells come from cells that already _____.
 - _____ are one-celled organisms; larger organisms are made of many cells, sometimes trillions of cells.
 - A microscope's _____ is found by multiplying the powers of the eyepiece and the objective lens.
- B. Cells are composed of parts that do _____ jobs.
- The flexible _____ is the boundary of the cell and helps control what enters and exits the cell; some cells have a **cell wall** that helps support and protect the cell.
 - _____ is a gelatinlike substance containing many chemicals the cell needs.
 - Specialized cell parts called _____ do various jobs within a cell.
 - The _____ contains hereditary material called chromosomes.
 - _____ are storage organelles for food, water, and wastes.
- C. Inside the _____, cellular respiration uses oxygen to convert food energy into a form the cell can use.
- _____ products of cellular respiration are carbon dioxide and water.
 - Leaf cells in plants contain **chloroplasts** that help the cell make its own food through _____.

Note-taking Worksheet (continued)**Section 2 The Different Jobs of Cells**

- A. The cells in many-celled organisms are _____ in shape and size for their function.
1. _____ specialized cells include fat cells, bone cells, nerve cells, and muscle cells.
 - a. _____ cells can store so much fat that the nucleus is pressed against the cell membrane.
 - b. A hard calcium and phosphorus material surrounds _____ cells.
 - c. _____ cells have many long branches to send and receive messages.
 - d. _____ cells have fibers that can contract and relax.
 2. _____ cells in leaves, stems, and roots are specialized to move food and water or to support the plant.
- B. Cells are _____ so they can work together to keep the organism alive.
1. **Tissues** are groups of similar cells that do the same kind of work; two or more tissues that work together form an _____.
 2. Groups of organs that work together to perform a job are called _____
_____.