

**Key Concept Builder** **LESSON 1****Cells and Life****Key Concept** How did scientists' understanding of cells develop?**Directions:** Put a check mark on the line before each item that helped scientists develop the cell theory.

- 1. building the first telescopes
- 2. building the first microscopes
- 3. making more advanced microscopes
- 4. the invention of the electron microscope
- 5. comparing plant and animal cells
- 6. discovering protists

**Directions:** Explain why each statement below is false according to the cell theory.

7. A one-celled organism is not a living thing.

A single celled organism is a living thing. The cell theory states that living things are made up of one or more cells. (Unicellular)

8. The smallest living unit is the atom.

According to cell theory, a cell is the smallest unit of life.

9. Viruses are not cells, but they are alive.

Viruses are not cells. Viruses do not contain cells. They are not living.

10. Plants do not come from cells; they come from seeds.

All cells, including plant cells, come from other cells. Seeds contain cells.

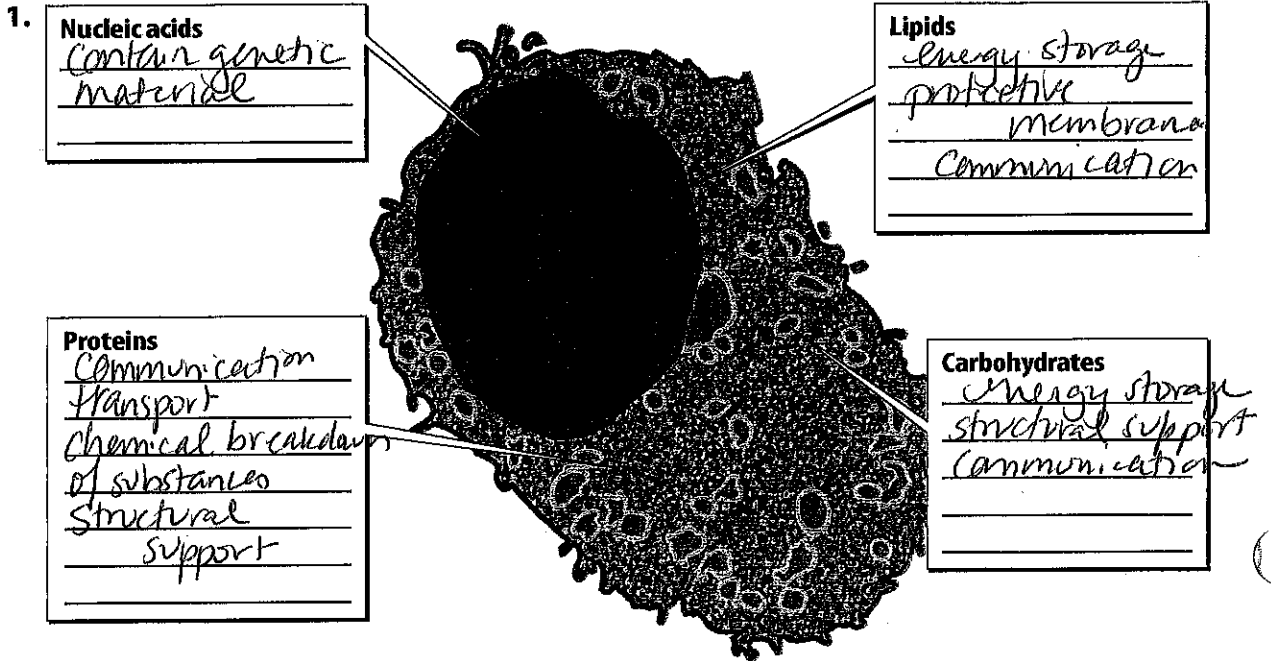
**Key Concept Builder** 

**LESSON 1**

**Cells and Life**

**Key Concept** What basic substances make up a cell?

**Directions:** Complete the diagram by writing the functions of each macromolecule after each bullet.



**Directions:** Answer each question on the lines provided. Use complete sentences.

2. What is a macromolecule?

are large molecules that form when smaller molecules join

3. Why are nucleic acids important in cells?

- contain the genetic info

4. What is special about the interaction of lipids and water?

Lipids do not dissolve in H<sub>2</sub>O