

Student Printout:

3 parts of the "Cell Theory"

8 Characteristics of Life

Directions: Cut out the large square. Fold along the dotted edges to create 4 flaps. Glue the inner square (this side) into your INB. Underneath each flap, list or describe each component using your textbook.

4 components found in prokaryotic and eukaryotic cells

compare light microscopes to electron microscopes

ANSWER KEY:

Cell theory

1. All cells are made from other cells.
2. Cells are the smallest unit of life.
3. All life are made of cells.

Characteristics of all life:

1. Ability to maintain homeostasis
2. Cellular basis
3. Response to stimulus and environmental changes
4. Ability to change over time (evolve)
5. Carry out metabolic processes
6. DNA basis for transferring genetic information from parent to offspring
7. Able to reproduce
8. Able to grow and develop

Microscopes -- It is recommended that students

1. Light microscopes produce a magnified image using visible light.
2. Electron microscope produce images using electron beams.

Teachers may want to show pictures that contrast the images produced with compound light microscopes, scanning electron microscopes, and transmission electron microscopes.

Components common to all cells:

1. Ribosomes
2. DNA
3. Cytoplasm
4. Plasma membrane (cell membrane, phospholipid bilayer)