

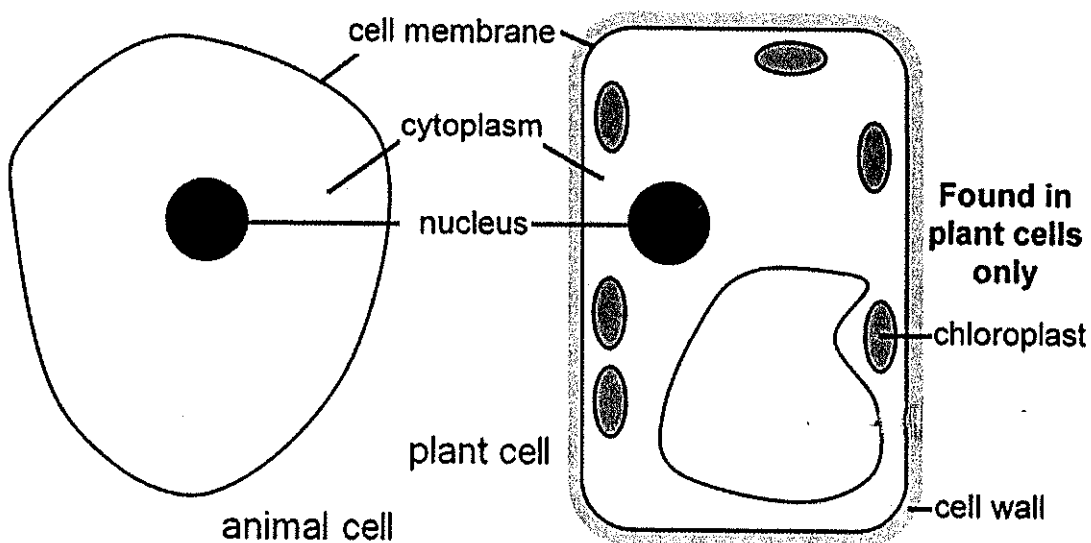
## Plant and Animal Cells Study Guide

Name \_\_\_\_\_ Test Date \_\_\_\_\_

You should be able to define the following terms:

- cell - tiny part of a living thing that can carry out all the processes of life. Plants and animals are both made of cells.
- cell membrane - a thin layer that allows some materials to pass in and out of the cell. It holds all the parts of a cell. (found in both animal and plant cells)
- nucleus - located in the center and controls growth of the cell. It contains genetic information (DNA).
- organelles - small, specialized structures in cells that carry out specific tasks. All organelles are located in the cytoplasm.
- cytoplasm - clear, jelly-like substance that fills the cell.
- cell wall - surrounds the plant cell; protects the cell; stiff cell walls of plants prevent the shape from changing.
- chloroplasts - produce food for the plant.

You should be able to label and identify the parts of plant and animal cells.



## **Plant and Animal Cells Study Guide**

**Explain why plant cells have chloroplasts and a cell wall, but animal cells do not.**

Plant cells have chloroplasts that makes food for the cell. Animal cells cannot make their own food, because animal cells find their own food. Plant cells need a cell wall for structure. Animal cells have the skeletal system for structure, so they do not need a cell wall.

**Explain how plant and animal cells are alike and how they are different.**

Plant and animal cells are alike in some ways and different in others. Both cells have a cell membrane (allows nutrients in and waste out), nucleus (controls cell growth), and cytoplasm (jelly-like substance that fills the cell). Both cells also have organelles, which are specialized structures in cells that carry out specific tasks. Only the plant cell has a cell wall (surrounds and protects the plant cell) and chloroplasts (produce food for the plant).