What Are the Parts of a Cell?

Main Idea Cells are the basic units of living things. Microscopes allow scientists to learn about the parts and functions of cells.

Fill in the blanks with words from the box below.

a • mitochondria	d cell membrane	g • vacuoles	j • nucleus
b • cell wall	e organelles	h • cytoplasm	
c cell	f • lysosomes	i • ribosomes	

1. The basic unit that makes up living things is the _____. (page A6)
2. Smaller structures called _____ perform specific functions in the cell. (page A8)
3. The _____ directs the activities of the cell. (page A8)
4. The _____ is a thin, flexible covering that surrounds all cells. (page A8)
5. In plant cells only, the _____ is a rigid outer layer that surrounds the cell membrane. (page A8)
6. Between the nucleus and the cell membrane is the _____. (page A8)
7. Tiny _____ assemble compounds called proteins. (page A9)
8. Membrane-bound sacs that are filled with fluid are _____. (page A9)
9. _____ are small, ball-shaped organelles that help the cell break down nutrients and old cell parts. (page A9)
10. Large, peanut-shaped organelles, called _____, are known as the "power plants" of the cell. (page A10)

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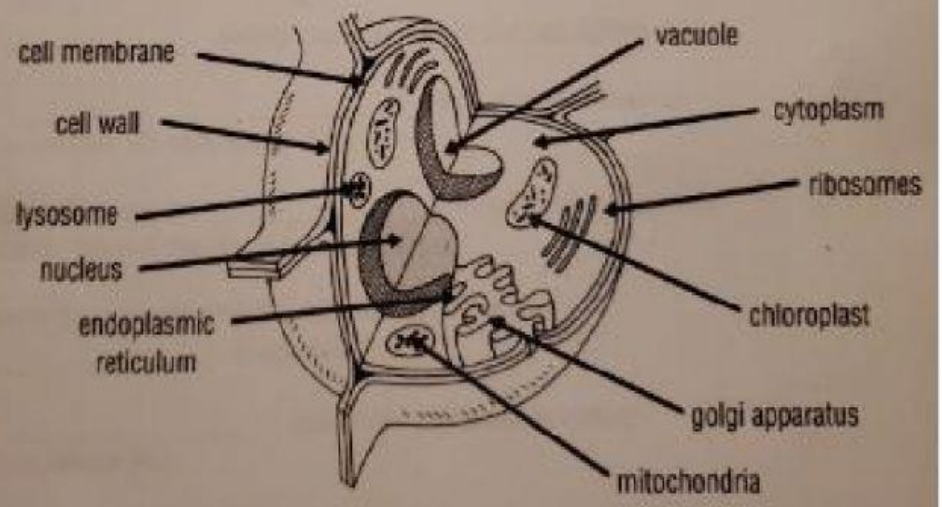
Write ~~true~~ t if the statement is true and ~~false~~ f if the statement is false.

t or f _____ **11.** According to the cell theory, all living things are made of one or more cells. (page A7)

t or f _____ **12.** Plant cells and animal cells have all the same organelles. (page A8)

Underline the term in the parentheses that correctly completes each statement.

13. A cell's (vacuole, nucleus) stores a molecule called DNA, which determines an organism's traits. (page A8)



14. The cell above is (an animal, a plant) cell. (page A8)

15. (Animal, Plant) cells often have one large, central vacuole. (page A9)

16. Chloroplasts in (animal, plant) cells use the energy in sunlight to make food. (page A10)