

## Unit 1: Cell Review

**1. State which cell (animal/plant) this structure is found in as well as its function:**

Cell Membrane  
Cell Wall  
Vacuole  
Chloroplast

Nucleus  
Nucleolus  
Cytoplasm  
Centriole

Mitochondria  
Endoplasmic Reticulum  
Ribosome

**2. Fill in the blanks (cell review)**

The passage of water in and out of cells is called \_\_\_\_\_.

In \_\_\_\_\_ cells identical to the parent cell are formed.

Each human body contains two sets of \_\_\_\_\_ chromosomes.

The shape of a cell is adapted to its \_\_\_\_\_.

Meiosis has \_\_\_\_\_ cell division (s).

Chromosome numbers are \_\_\_\_\_ during Meiosis.

When there are more solutes outside the cell than inside the cell the cell will \_\_\_\_\_.

Where there are less solutes inside the cell than outside the cell the cell will \_\_\_\_\_.

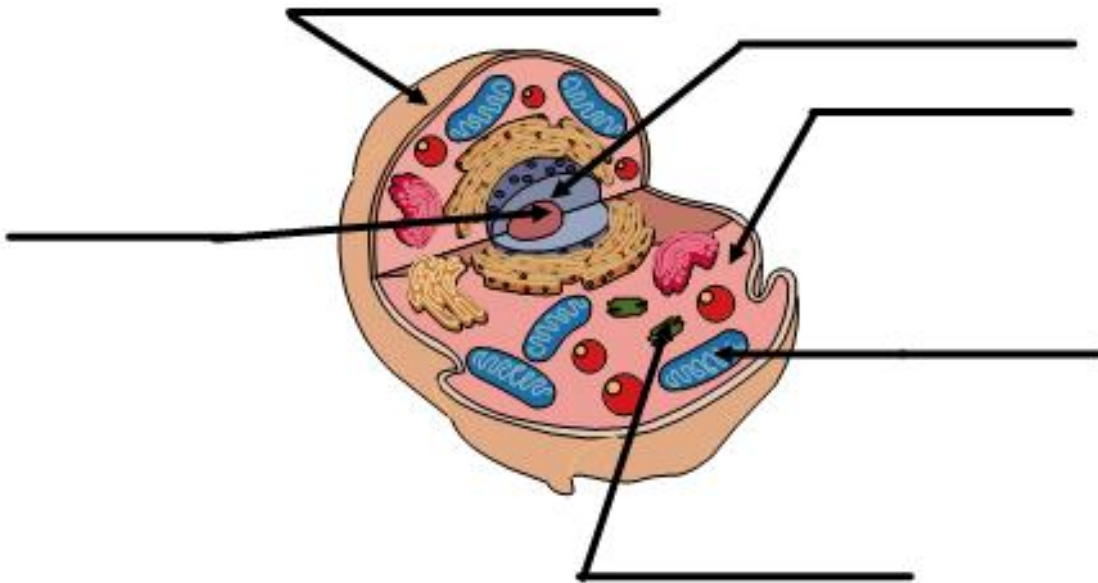
The original cell in reproduction is called a \_\_\_\_\_ cell.

The end product in cellular reproduction is called the \_\_\_\_\_ cell.

\_\_\_\_\_ and \_\_\_\_\_ decide what moves through a cell membrane.

The passage of molecules in and out of cell is called \_\_\_\_\_.

**3. Label each part of the cell by filling in the blank spaces.**



**4. Place the following in the correct order by placing the numbers 1,2,3,4.... In the space provided**

- \_\_\_\_\_ paired chromosomes are pulled apart on opposite ends of the cell
- \_\_\_\_\_ chromosomes pair
- \_\_\_\_\_ cell divides into 2 daughter cells
- \_\_\_\_\_ paired chromosomes line up in middle

**5. Answer each of the following questions by placing a T or an F in the space provided.**

- a. A cell is the basic unit of structure and function in living things. \_\_\_\_\_
- b. Botanists study cells \_\_\_\_\_
- c. Ribosomes are the storage bins of the cell. \_\_\_\_\_
- d. Meiosis results in two cells that have identical chromosomes \_\_\_\_\_
- e. The cell membrane is a nonliving part of the cell. \_\_\_\_\_
- f. Mitochondria help to make proteins in the cell \_\_\_\_\_

**6. Answer each of the following short answer questions:**

- a. Describe what happens when a normal cell is placed in a concentrated (*lots of sugar*) solution.  
Does water move in or out?
- b. Describe what happens when a normal cell is placed in a very dilute (*lots of water*) solution.  
Does water move in or out?
- c. How is meiosis different from mitosis?