

## **Organelle Structure & Function Mix & Match**

Structure/Description		Organelle	Function	
Α	Membrane bound sack in the plant cell.	Cell (Plasma) Membrane	1	It is the spot of photosynthesis where "food" is made for plant cells.
В	Spherical, often in the center of the cell, bounded by a membrane.	Nucleus	2	It is used to transport food or other materials from one part of the cell to another.
С	Tiny, round organelles that float around in the cytoplasm or attaches to the ER.	Cytoplasm	3	Cell brain or the computer" of the cell. Contains genetic information.
D	Semi-permeable membrane surrounding the cell.	Vacuole	4	Transports materials out of the cell in vesicles.
Ε	Semi-fluid between the cell membrane and the nucleus.	Cell Wall	5	Jelly-like substance within the cell that holds up the other cell parts in the cells.
F	White, maze-like cell part surrounding the nucleus	Mitochondria	6	It's the "warehouse" in a cell that stores food and waste products.
G	Shaped like a jelly bean or peanut.	Chloroplasts	7	It supports and provides rigidity for cells.
Н	Surrounds a plant cell.	Endoplasmic Reticulum	8	It creates protein.
I	Green, similar in shape to a mitochondria.	Ribosomes	9	"Traffic-cop". It selects what enters the cell.
J	Stacks of saucer-like membranes	Golgi Apparatus (Body)	10	Called the "powerhouse of the cell" because it creates energy for cells.

## **Cell Organelles Questions:**

- 1. Describe 2 similarities and 2 differences between plant cells and animal cells.
- 2. How are the functions of the endoplasmic reticulum and Golgi apparatus related?
- 3. Many organelles contain more than one membranes. List these organelles.
- 4. Different cells contain different amounts of each organelle.
  - a) What type of organelle would be found in high amounts in a **leaf** cell? Why?
  - b) What type of organelle would be found in high amounts in a plant root cell? Why?
  - b) What type of organelle would be found in high amounts in a muscle cell?
  - c) What type of organelle would be found in high amounts in a **liver** cell (the liver is an organ responsible for breaking down food and detoxifying the blood)?