A____ Materials move in and out of the cell WITHOUT using the cell's energy
B____ Materials LEAVING the cell through the vesicles
C____The movement of substances from an area of higher concentration to an area of lower concentration
D____Diffusion of water molecules only through a membrane
E____When molecules pass through a membrane via transport proteins
F____Process that a cell takes IN a substance by surrounding it by a membrane
G____ Materials move in and out of the cell by USING energy

1) Passive transport
2) Active transport
3) Diffusion
4) Osmosis
5) Facilitated diffusion
6) Endocytosis
7) Exocytosis

Cells Unit Study Guide

Match the correct term to the definition.

1) Very stiff, outside layer of a plant cell. _____
2) The "powerhouse", or energy processor. _____
3) Storage for water, food and waste. _____
4) Packages proteins and puts them in the vesicles. _____
5) An outside layer that controls what comes in and out of a plant and animal cell. _____
6) A passageway where the ribosomes live. _____
7) Makes glucose in a plant cell. _____
8) The control center of a cell. _____
9) A jelly-like fluid that holds organelles in place. _____
10) Tiny particles that make proteins and are located on the ER. _____

A) Chloroplast
B) Cytoplasm
C) Cell Wall
D) Cell Membrane
E) Endoplasmic Reticulum
F) Golgi Bodies
G) Mitochondria
H) Nucleus
I) Ribosomes
J) Vacuole

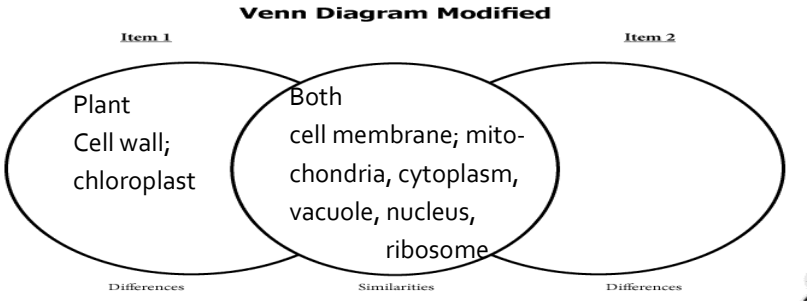
Check your work:

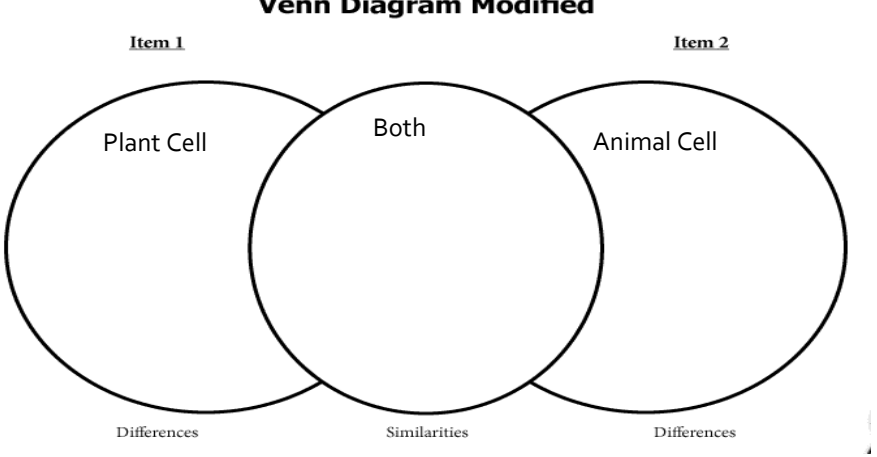
Vocab:

1) C– Cell Wall
2) G– mitochondria
3) J– Vacuole
4) F– Golgi Bodies
5) D– Cell Membrane
6) E– Endoplasmic Reticulum (ER)
7) A– Chloroplast
8) H– Nucleus
9) B– Cytoplasm
10) I– Ribosomes

A) 1
B) 7
C) 3
D) 4
E) 5
F) 6
G) 2

1) Light energy, Carbon Dioxide and Water go into the chloroplast; glucose and oxygen come out
2) Chloroplasts absorb light energy to help the process of photosynthesis.
3) Glucose and oxygen go into the mitochondria; Energy, carbon dioxide and water are released.
4) Photosynthesis are related because they are both processes that give the cells energy. They both use glucose, carbon dioxide and oxygen. Also, they are the opposite reactions of one another.





1) Explain the process of photosynthesis. Include where it's done in the cell, what goes into it, and what comes out of it.

2) What role do chloroplasts play in photosynthesis?

3) Explain the process of respiration. Include where it's done in the cell, what goes into it, and what comes out of it.

4) Explain how photosynthesis and respiration are related.