

Cell Structures Study Guide

1. The two types of cells are _____ and _____.
2. **List** 2 examples of each type of cell.
3. **List** 3 similarities between the 2 types of cells.
4. **List** 3 differences between the 2 types of cells.
5. How are plants cells different from animal cells? **List** at least 3 ways.
6. **Match** the following cell structures with the correct functions.

1. _____ vacuole	A. produces energy for cell functions
2. _____ chloroplast	B. a living thing
3. _____ cell membrane	C. chemical instructions/directions for cell structure and function
4. _____ nucleus	D. a part of a cell that has a specific job to do
5. _____ mitochondria	E. the organelle in which plants produce food
6. _____ DNA	F. the smallest unit of life
7. _____ cell wall	G. control center of the cell
8. _____ eukaryote	H. a cell without a nucleus
9. _____ lysosome	I. gel-like liquid that surrounds and protects structures in the nucleus
10. _____ organelle	J. flexible cover surrounding cell, has pores
11. _____ cytoplasm	K. a cell with a nucleus and many other organelles, very complex
12. _____ cell	L. storage area in plant/animal cells for food/water, larger in plant cells
13. _____ prokaryote	M. rigid extra boundary around plant cells, provides support and protection
14. _____ organism	N. digest wastes and worn out cell parts

Riddle Me This - Write the name of the organelle in the blank.

1. I'm a real "powerhouse",
That's plain to see.
I break down food
To release energy.
Who am I? _____

6. Found only in plant cells.
I'm green as can be.
I make food for the plant
Using the sun's energy.
Who am I? _____

2. I'm strong and stout,
Getting through me is tough.
I'm found only in plants,
But I guess that's enough.
Who am I? _____

7. I'm full of holes,
Flexible, and thin.
I control what gets out
As well as what comes in.
Who am I? _____

3. I've been called a "storage tank"
By those with little taste.
I'm a sack filled with water,
Food, enzymes, or waste
Who am I? _____

8. Proteins are made here
Even though I'm quite small.
You can find me in the cytoplasm
Or, attached to E.R.'s wall.
Who am I? _____

4. I'm the "brain" of the cell
Or so they say.
I regulate activities
from day to day.
Who am I? _____

9. Since I contain many enzymes,
I can digest an injured cell;
And break down a large molecule
Into a smaller one as well.
Who am I? _____

Write Your Own Riddle:

5. _____

Who am I? _____

10. _____

Who am I? _____

Organelle Analogies: Write an analogies for three different organelles.

1. **Example:** If I were a nucleus, I would be the king of organelles, ruling the cell and telling all the organelles what to do every day.
2. If I were a _____, I would...
3. If I were a _____, I would...
4. If I were a _____, I would...