**Cell Structure and Function Review**

1) Name the 3 parts of the cell theory

1.

2.

3.

2) What scientist concluded that all living things are made of cells?

3) What is a prokaryotic cell?

4) What is a eukaryotic cell?

5) What are organelles?

6) Explain what the cytoplasm is.

7) What is the job of the nucleus?

8) What surrounds the nucleus and allows material to enter and leave the nucleus?

9) What do we call the distinct, threadlike structures in the nucleus that contain the genetic information?

10) What is the small, dense region inside the nucleus where ribosomes are assembled?

11) What do we call the small particles of protein and RNA found throughout the cytoplasm?

12) Where are lipid parts of the cell membrane made? This is also a where proteins and other materials are exported from the cell.

13) Which organelle modifies sorts and packages proteins and other materials? It is much like the Postal Service.

14) Which organelle is filled with enzymes? Its purpose is the digestion and breakdown of materials so they can be used by the cell.

15) Which organelle stores materials such as salt, water, proteins and carbohydrates? It acts as a ‘storage room” in the cell.

16) This organelle converts chemical energy into food that is more convenient for the cell to use.

17) This green-colored organelle captures energy from the sun and uses it during photosynthesis.

18) Which organelle is a network of protein filaments that helps the cell maintain shape and form? It acts as a “skeleton” in the cell.

19) What are the two protein filaments that make up the cytoskeleton?

20) What is the thin, flexible barrier that surrounds the cell? It is like the “gate” that regulates what enters and leaves the cell.

21) Why is the double-layered sheet that makes up the cell membrane called a, “lipid BI-layer?”

22) In plant cells, what structure supports and protects the cell?

23) What is the process called when particles move from an area of low concentration to an area of high concentration?

24) What do we call the diffusion of water through a selectively permeable membrane?

25) Explain what kind of solution is hypertonic.

26) Explain what kind of solution is hypotonic.

27) Explain what kind of solution is isotonic.

28) What takes place during “active transport?”

29) What takes place during “passive transport?”

30) Explain the difference between rough ER and smooth ER.

31) List two organelles found in the plant cell which aren’t found in the animal cell.

32) List the one organelle found in the animal cell that isn’t found in the plant cell.

33) Describe the difference between organelles used for movement, cilia & flagella.

34) How is total magnification calculated?

35) Know all types of passive and active transport & be able to recognize examples.

**STUDY:**

1. Cell drawings!
2. Microscope Labeling Worksheet & Functions!
3. Cell Transport in Living Things Worksheet!
4. Notes.