Scientist's Name: _____

Work Hard – Get Smart – No Excuses.

Exploring Cells!!

Objectives:
I can understand the relative sizes of objects, including the cell.
I can sketch and identify the function of cell structures.
I can compare eukaryote to prokaryote cells.
I can compare plant and animals cells.

Activity 1: Go to http://learn.genetics.utah.edu/content/cells/scale/

Directions: Zoom in and out into the ***Microscopic World*** and explore the relative size of things!

Answer the following questions:
1) Which is bigger - ***grain of rice*** or an ***Amoeba***? _____
2) Which is bigger – an ***Ameoba*** or a ***paramecium***? _____
3) Which is bigger - a ***skin cell*** or a ***paramecium***? _____
4) Which is bigger - ***blood cell*** or a ***bacteria***? _____
5) What is the second to smallest thing? _____ Does it surprise you how tiny this is? _____

Activity 2: go to the website: www.cellsalive.com
Click on the green words "interactive plant & animal cells"

Directions: *Click through each of the* ***ORGANELLES*** *and read their descriptions. Remember –* ***ORGANELLES are the little structures that make up cells and they each have a specific purpose in the cell.*** *Use the information to answer the questions.*

1. What do the **mitochondrion** do for the cell that is so important???

2. What does the **nucleus** do for the cell? (Read the second paragraph!)

3. What is ***cytosol*** and ***Cytoplasm??***

4. What do the **vacuoles** do for the cell? Which body system is are the vacuoles similar to?

5. Click **Cell Wall** – what does it tell you?

6. Click **chloroplasts** – what does it tell you?

Next, go to the **Plant Cell.** Things like plants, trees, and even lettuce and tomatoes are made of plant cells, wow!!!

1. Click **chloroplasts.** The chloroplasts contain the plant's _____ that are responsible for the plant's _____ and ability to absorb _____.

2. Why do you think plant cells need **chloroplasts** and animal cells do not?

3. Click **Cell Wall.** The cell wall provides and maintains the _____ of these _____ and serves as a _____.

4. Why do you think plant cells need **cell walls** and animal cells do not?