Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_

Unit 7 CBA Review

1. Define the following terms:
* Cell is the basic unit of structure and function
* Tissue is a group of cells working together to perform a specific function
* Organ is a group of tissues working together to perform a specific function.
* Organ system is a group of organs working together to perform a specific function.
* Organism is a group of organ systems working together
1. List the levels of organization in order of least complex to most complex:

Organism Tissue Organ Cell Organ System

Cell Tissue Organ Organ System Organism

1. Differentiate between the plant and animal cells. Plant cells have Chloroplasts, a Cell Wall and 1 large central Vacuole. Animal cells do not have Chloroplasts, a Cell Wall and they have several smaller vacuoles.
2. All living things have cells\_.
3. Write the Cell Theory. Cells are the basic unit of structure and function / All living things are made up of cells / Cells come from preexisting cells.
4. What is the function and location of each of the organelles listed below?

|  |  |  |
| --- | --- | --- |
| Organelle | Function | LocationPlant/animal/both |
| Cytoplasm | Gel-like fluid that fills in the space between the organelles and cushions the organelles | Both |
| Mitochondria | Provides energy for the cell | Both |
| Nucleus | Controls the activities of the cell and holds the DNA | Both  |
| Chloroplast | Site where Photosynthesis occurs/takes light energy and converts it into food(glucose or chemical energy) / gives the cell its color  | Plant |
| Cell Wall | Provides structure and support | Plant |
| Cell Membrane | Controls what goes in and out of the cell | Both |
| Vacuole | Stores nutrients, water and wastes | Both |

1. Using everyday items, draw a model of a plant cell below:



Cell Wall=the sides of the basket

Vacuole= a baggie filled with trash

Chloroplast = green linking blocks

Nucleus=a ball

Mitochondria=pink beads on a paperclip

1. Label the following structures on the Plant cell to the right:

|  |  |
| --- | --- |
| A | Nucleus |
| G | Vacuole |
| H | Cytoplasm |
| I | Chloroplast |
| J | Cell Wall |
| K | Cell Membrane |
| L | Mitochondria |

1. Create an analogy for each organelle listed below:
	1. Cytoplasm \_halls of the school
	2. Mitochondria outlets in the classroom
	3. Nucleus principal’s office
	4. Chloroplast cafeteria kitchen
	5. Cell Wall walls of the school building
	6. Cell Membrane school officer
	7. Vacuole classroom trashcan

|  |  |
| --- | --- |
| Image result for measuring cup drawing1 cup | Organism |
| Image result for measuring cup drawing3/4 cup | Organ Systems |
| Image result for measuring cup drawing2/3 cup  | Organs |
| Image result for measuring cup drawing1/2 cup | Tissue |
| Image result for measuring cup drawing1/4 cup | Cell |

1. Place the correct level of organization next to the measuring cup that it would represent.