

Name _____

Due _____

HW: Functions of Cell Organelles

Match the following organelles with their functions:

- _____ 1) Proteins are absorbed, modified, packaged and distributed to their destination in this organelle.
- _____ 2) Although not membrane bound, this organelle is the site of protein synthesis.
- _____ 3) The “Powerhouse” of the cell, this organelle is the site of cellular respiration and production of ATP.
- _____ 4) The “skeleton” and “muscles” of the cell, this structure is made of microtubules that also form cilia, flagella and centrioles.
- _____ 5) This organelle is green due to the presence of chlorophyll and is the site of photosynthesis.
- _____ 6) This set of smooth membranes functions to synthesize lipids and detoxify drugs and toxins.
- _____ 7) This membrane holds the chromosomes within the nucleus.
- _____ 8) This organelle is very large in plant cells and contains food, enzymes, minerals, wastes and water.
- _____ 9) This, the largest object in a eukaryotic cell, holds the cell’s genetic information.
- _____ 10) Everything between the cell membrane and the nucleus. Contains all organelles and cytosol (solution in the cell).
- _____ 11) Composed of cellulose, this gives plant cells stability.
- _____ 12) This selectively permeable structure is composed of phospholipids embedded with proteins.
- _____ 13) This extensive network of membranes is studded with ribosomes and functions as a surface for protein synthesis and transport of materials.
- _____ 14) This specialized vesicle contains digestive enzymes and is the site of hydrolysis in animal cells
- _____ 15) These small microtubules are involved in animal cell division.
- _____ 16) Dark sections of DNA and proteins in the nucleus which are the site of ribosome synthesis.
- _____ 17) Structures within the nucleus that are composed of DNA. Called chromatin in a non-dividing cell.

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|------------------|--------------------|---------------------|
| a. mitochondria | g. cell wall | m. nuclear envelope |
| b. lysosome | h. smooth ER | n. vacuole |
| c. cell membrane | i. chromosomes | o. ribosomes |
| d. nucleus | j. Golgi apparatus | p. cytoplasm |
| e. chloroplast | k. rough ER | q. centrioles |
| f. nucleoli | l. cytoskeleton | |

18. Describe the different types of proteins found in the cell membrane. What are their functions?
