Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Cell Structures

* Organelles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ inside a cell in which functions are carried out to ensure the cells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (work properly)
* The cell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a structure that surrounds the cells and separates the cells interior from its surroundings. This protective barrier controls the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of materials into and out of the cell.



Organelles

* Cytoplasm is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_-like substance that contains organelles, water, and other life-supporting materials.
* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the organelle that controls all the activities within the cell. It contains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, DNA, the hereditary material that is passed on to offspring.
* Mitochondria are the energy producers in the cell. Energy is released from the food we eat by the process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Ribosomes manufacture \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the building blocks for a variety of structures in the cell. Some are found in the cytoplasm and others are attached to the endoplasmic reticulum.
* Endoplasmic reticulum is a network of folded channels that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ materials within the cell.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ body is a structure that sorts and packages the proteins in membrane-wrapped structures called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are small packages carrying proteins, nutrients, and water. They carry water inside, outside, and all around the cell.
* Vacuoles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ storage containers. These tend to be larger in plant cells than in animal cells.
* Lysosomes contain digestive \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that break down food particles, cell wastes and worn-our cell parts.

Think-pair-share:

Compare the parts of the cell and their functions to the parts of a school and its functions

|  |  |  |
| --- | --- | --- |
| School | Cell | Function |
|  | Cell Membrane |  |
|  | Cytoplasm |  |
|  | Nucleus |  |
|  | Mitochondria |  |
|  | Ribosome |  |
|  | Endoplasmic Reticulum |  |
|  | Golgi Body |  |
|  | Vesicles |  |
|  | Vacuoles |  |
|  | Lysosome |  |

Difference between Plant and Animal Cells



* Two parts found in the plant cell but not in the animal cell are:
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a rigid structure that surrounds the cell membrane to provide support and protection to the box-shaped plant cell.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ trap energy from the sun and change it into chemical energy the plant can use.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the chemical reaction that takes place when carbon dioxide and water react in the presence of sunlight to produce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.