

Science Virtual Learning

8th Grade Science Parts of the Cell

May 20, 2020



8th Grade Science Lesson: May 20, 2020

Objective/Learning Target:

I can list parts of the cell and describe the function of each.



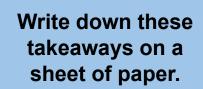
Bellwork

- 1. Watch <u>this video</u> to remember the different parts of the cell.
- 2. On a piece of paper, answer the questions:
 - a. What is an organelle? (the definition, not an example)
 - b. What organelle is responsible for controlling the cell?
 - c. What organelles are found only in plants?



Bellwork Answers

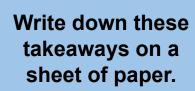
- 1. On a piece of paper, answer the questions:
 - a. What is an organelle? (the definition, not an example)
 - i. These carry out different jobs for the cell. They are like mini organs for a cell
 - b. What organelle is responsible for controlling the cell?
 - i. The nucleus
 - c. What organelles or structures are found only in plants?
 - i. Possible answers include: Cell wall, chloroplast, large vacuoles





Today Part 1: Big Ideas - Cell Organelles & Functions

Nucleus	Controls the cell (kind of like a brain)
Mitochondria	Creates energy for the cell (a part of cellular respiration)
Cell Wall	Provides outer structure to plant cells only!
Cell Membrane	Controls what goes in and out of the cell (like a screen on a window)
Chloroplast	Creates energy for the cell (a part of photosynthesis) plant cells only!
Ribosome	Creates proteins





Today Part 1: Big Ideas

Cell Organelles & Their Functions (Part 2)				
Endoplasmic Reticulum	Helps to move proteins once they are created			
Golgi Apparatus	Packages materials and moves them around the cell			
Lysosome	Gets rid of waste in the cell/recycles materials			
Cytoplasm	Inner environment of the cell (Jello-like)			
Vacuole	Storage in the cell (large in plants, small in animal cells)			



Today Part 2

Sort the organelles you copied down in previous slides into the categories below based on their functions. Click on this link for the answers.

Organelles used for: Transporting Materials	Organelles used for: Control of the Cell	Organelles used for making proteins
Organelles used for storage or waste removal	Organelles used for protection of the cell	Organelles used for making energy for cells Draw this organizer

on a

sheet of paper and fill in.



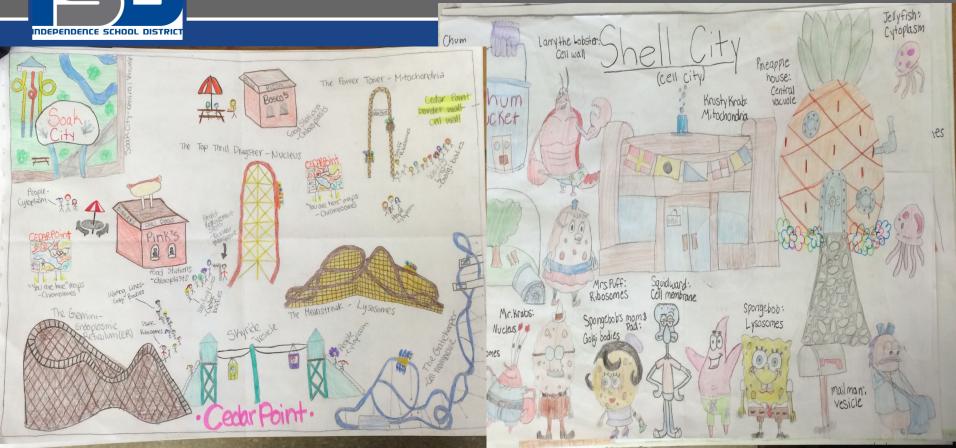
Today

Cell Connection- you will need a blank piece of paper for this.

- 1. You are going to model/draw a cell based on a scenario of your choice (video game, tv show, sporting event,...etc)
- 2. You must include these organelles in your representation: nucleus, cytoplasm, cell membrane, mitochondria, ribosome, cell wall, vacuole, chloroplast
- 3. On the back of your paper you should have these for each organelle:
 - a. Organelle (mitochondria)
 - b. What represents that organelle (powerplant)
 - c. Why you chose that to represent the organelle (powerplant is in charge of energy creation just like the mitochondria)



Cell Connection examples





Check Your Learning:

- Practice your knowledge with <u>this worksheet</u> (write answers on a sheet of paper)
 - a. Check your answers with this link.
- 2. Practice the functions of the organelles and some ways to remember them <u>using this worksheet</u> (answer on a sheet of paper). The answers are on the third page of the link.
- 3. Play this Quizziz at least 3 times to practice different cell organelles.