



Science Virtual Learning

8th Grade Science

Parts of the Cell

May 20, 2020



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Lesson: May 20, 2020

Objective/Learning Target:

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

Bellwork

1. Watch [this video](#) 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**

Write down these takeaways on a sheet of paper.

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 |

Write down these takeaways on a sheet of paper.

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.](#)

| | | |
|---|---|--|
| <u>Organelles used for:</u> <u>Transporting Materials</u> | <u>Organelles used for:</u> <u>Control of the Cell</u> | <u>Organelles used for</u> <u>making proteins</u> |
| <u>Organelles used for</u> <u>storage or waste</u> <u>removal</u> | <u>Organelles used for</u> <u>protection of the cell</u> | <u>Organelles used for</u> <u>making energy for cells</u> |

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)

Check Your Learning:

1. Practice your knowledge with [this worksheet](#) (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 [using this worksheet](#) (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.