

## Cell Organelle Web Quest

**Objective:** Upon completion of this activity, you should be able to describe the cell and identify its parts (organelles). You should be able to distinguish between plant and animal cells.

### PART I

Go to: [www.wisc-online.com/objects/index\\_tj.asp?objid=AP11604](http://www.wisc-online.com/objects/index_tj.asp?objid=AP11604)

Click "Next" to begin the activity. Answer the following questions.

1. What is an organelle?
2. What do ribosomes do?
3. What do they look like?
4. What does the Golgi apparatus (or Golgi bodies) do?
5. What is the function of the mitochondria?
6. What does the nuclear membrane do?
7. What is the function of the nucleus?
8. What is the cell Membrane?

### PART II

Go to the interactive cell models at [www.cellsalive.com/cells/3dcell.htm](http://www.cellsalive.com/cells/3dcell.htm).

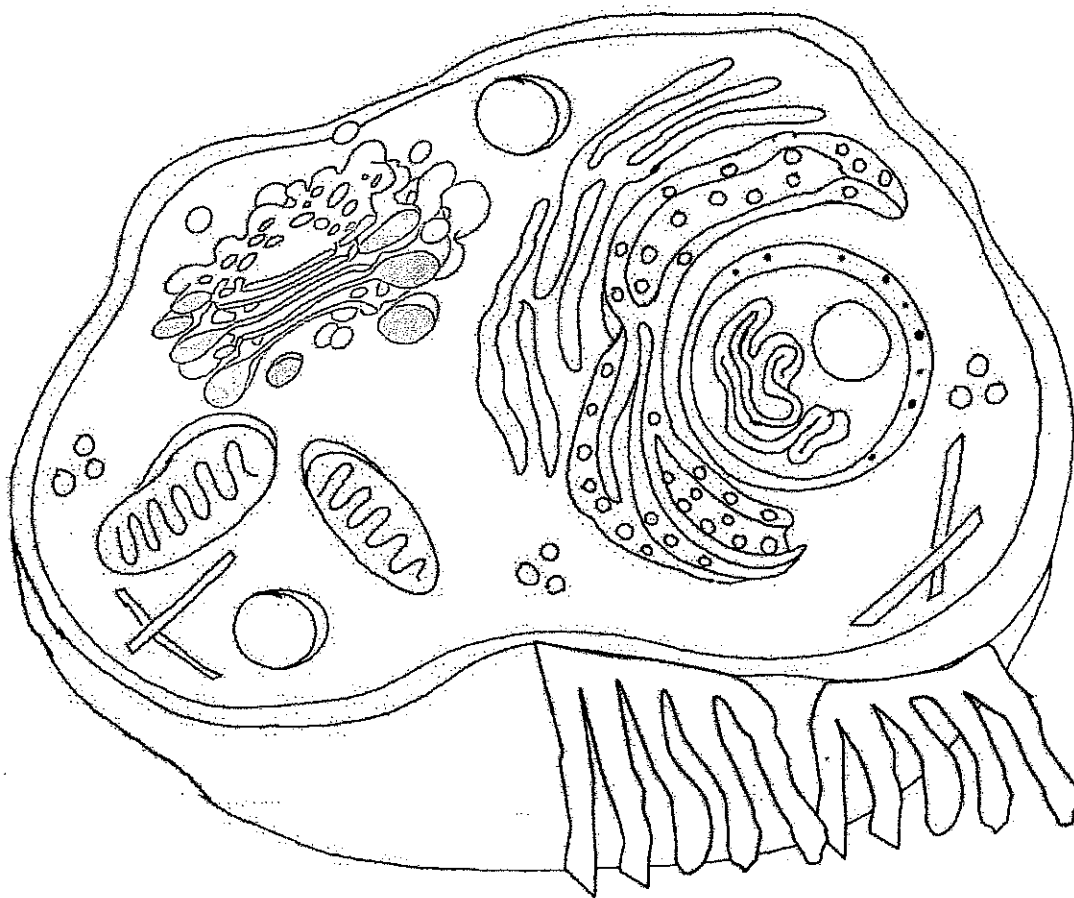
9. What is the difference between smooth and rough endoplasmic reticulum (ER)?
10. Where is the nucleus found?
11. What is the function of a lysosome?
12. What makes plant cells green?
13. What does a vacuole do?
14. What is the purpose of the cell wall? What type of cell is it found in?
15. What is a chloroplast?
16. What is the purpose of a cell? [http://www.ehow.com/facts\\_5439557\\_purpose-cell.html](http://www.ehow.com/facts_5439557_purpose-cell.html)
17. What are the two types of reproduction and explain?  
[http://www.biotopics.co.uk/genes1/asexual\\_and\\_sexual\\_reproduction.html](http://www.biotopics.co.uk/genes1/asexual_and_sexual_reproduction.html)
  - a. \_\_\_\_\_ -
  - b. \_\_\_\_\_ -

**18. NOW USE THE PROVIDED WEBSITE LINKS TO HELP YOU LABEL YOUR CELL DIAGRAMS. DON'T FORGET TO DO BOTH THE PLANT AND THE ANIMAL CELL!!!**

**Animal Cell Coloring**

Use the following link to assist you: <http://www.enchantedlearning.com/subjects/animals/cell/>

- |  |  |  |
|--|--|--|
| Cell Membrane (light brown) <input type="checkbox"/>   | Nucleolus (black) <input type="checkbox"/>                       | Mitochondria (orange) <input type="checkbox"/>                     |
| Cytoplasm (white) <input type="checkbox"/>             | Golgi Apparatus (pink) <input type="checkbox"/>                  | Lysosome (purple) <input type="checkbox"/>                         |
| Ribosome (red) <input type="checkbox"/>                | Cilia (yellow) <input type="checkbox"/>                          | Smooth Endoplasmic Reticulum (light blue) <input type="checkbox"/> |
| Nuclear Membrane (dark brown) <input type="checkbox"/> | Rough Endoplasmic Reticulum (dark blue) <input type="checkbox"/> |  |



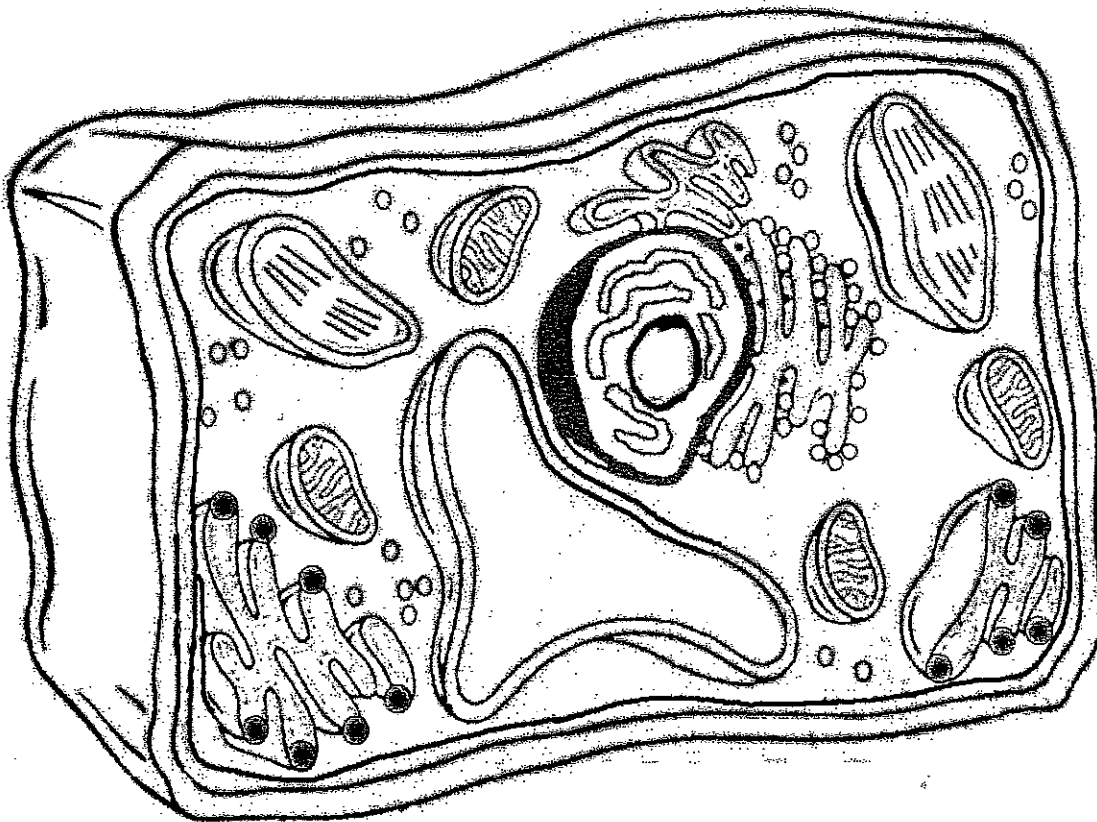
II. Briefly describe the function of the cell parts.

1. Cell membrane \_\_\_\_\_
2. Endoplasmic Reticulum \_\_\_\_\_
3. Ribosome \_\_\_\_\_
4. Golgi Apparatus \_\_\_\_\_
5. Lysosome \_\_\_\_\_
6. Microtubule \_\_\_\_\_
7. Mitochondria \_\_\_\_\_
8. Nucleus \_\_\_\_\_

### Plant Cell Coloring

Use the following link to assist you: <http://www.enchantedlearning.com/subjects/plants/cell/>

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Cell Membrane (orange) | <input type="checkbox"/> Cell Wall (dark green)              | <input type="checkbox"/> Ribosome (purple)         |
| <input type="checkbox"/> Mitochondria (red)     | <input type="checkbox"/> Nucleolus (brown)                   | <input type="checkbox"/> Cytoplasm (white)         |
| <input type="checkbox"/> Vacuole (light blue)   | <input type="checkbox"/> Chloroplasts (light green)          | <input type="checkbox"/> Golgi Apparatus (dk blue) |
| <input type="checkbox"/> Chromosomes (gray)     | <input type="checkbox"/> Smooth Endoplasmic Reticulum (pink) |  |
|   | <input type="checkbox"/> Rough Endoplasmic Reticulum (pink)  |  |



### Analysis

1. Name two things found in a plant cell that are not found in an animal cell:
2. How does the shape of a plant cell differ from that of an animal cell?
3. What is the function of the chloroplasts?
4. What is the function of the vacuole?

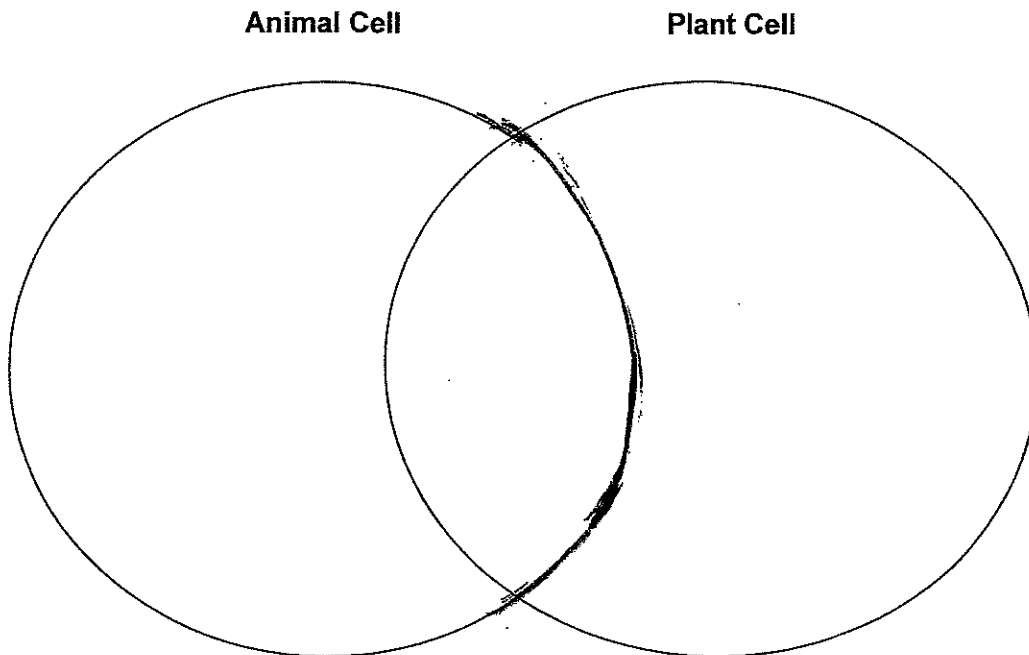
### PART III

Go to the Cell Comparison Tutorial

<https://www.youtube.com/watch?v=0eHzdj69O6M>

Click on *Animal vs. Plant Cell*

15. Complete the Venn Diagram and make a copy of the correct answers here.



### PART IV

Cell Quiz: Go to [https://www.biologycorner.com/quiz/qz\\_cell.html](https://www.biologycorner.com/quiz/qz_cell.html). Complete the cell quiz.

**When you are finished, raise your hand to show your score to your teacher. Score**

\_\_\_\_\_ **Teacher's signature** \_\_\_\_\_

### PART V

Finished with time to spare? Go back to [www.cellsalive.com/cells/3dcell.htm](http://www.cellsalive.com/cells/3dcell.htm).

Click on PUZZLES on the left hand side of the screen and complete a cell puzzle.

You may also try a review game:

Battleship: [www.quia.com/ba/15335.html](http://www.quia.com/ba/15335.html)

Matching: [www.quia.com/mc/310905.html](http://www.quia.com/mc/310905.html)