

Name \_\_\_\_\_ Date \_\_\_\_\_ Bell \_\_\_\_\_

## Unit 3: Lesson 1- The Characteristics of Cells

### Vocabulary

1. Cell (page 206)-

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2. Organism (page 206)-

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3. Cell Membrane (page 210)-

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4. Cytoplasm (page 210)-

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5. Organelle (page 210)-

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6. Nucleus (page 210- **DON'T USE DEFINITION IN THE GLOSSARY!**)

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7. Prokaryote (page 211)-

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8. Eukaryote (page 211)-

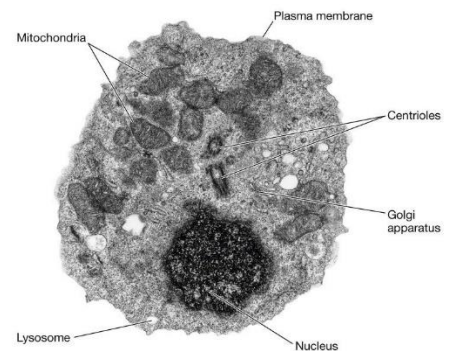
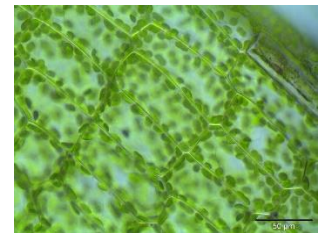
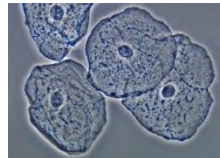
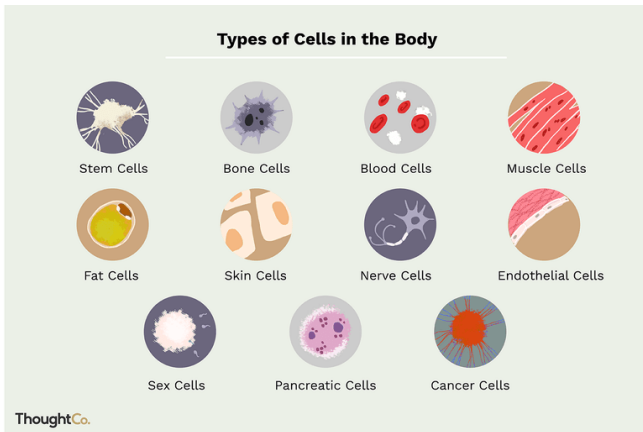
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# What is a Cell? Page 206

1. What are all living things made up of? \_\_\_\_\_
2. What is a cell?  
\_\_\_\_\_  
\_\_\_\_\_
3. What is an organism?  
\_\_\_\_\_  
\_\_\_\_\_
4. How many cells can an organism be made up of? \_\_\_\_\_
5. How many cells do humans have? \_\_\_\_\_
6. Who was Robert Hooke?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. What tool did he use to observe cells? \_\_\_\_\_
8. What was the first cell that he looked at? \_\_\_\_\_
9. How did he come up with the name, "Cells?"  
\_\_\_\_\_  
\_\_\_\_\_



## What is Cell Theory? Page 208

10. What were the names of the four scientists who contributed to Cell Theory?

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11. What does Cell Theory state?

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12. Who was Anton Van Leeuwenhoek and what was his contribution to Cell Theory?

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13. Who was Matthias Schleiden and what was his contribution to Cell theory?

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14. Who was Theodore Schwann and what was his contribution to Cell Theory?

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15. What is the difference between unicellular and multicellular organisms?

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16. How is the structure of a unicellular organism different than the structure of a multicellular organism? How does this affect function?

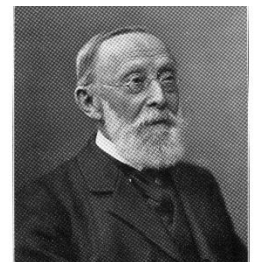
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17. Schwann wrote two parts to the cell theory. The first part was that all organisms are made up of one or more cells. What was the other part of cell theory that he concluded?

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18. Who was Rudolf Virchow and what did he contribute to cell theory?

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## What Parts Do All Cells Have in Common? Page 210

19. What do all cells have in common?

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20. What is the cell membrane?

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21. Compare the function of the cell membrane to something in the classroom?

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22. What is cytoplasm?

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23. Compare the function of the cytoplasm with something in everyday life?

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24. What are organelles? What is an example of one?

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25. Compare the function of the organelles with something in everyday life?

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26. What is DNA? Where is it stored?

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27. What is a nucleus?

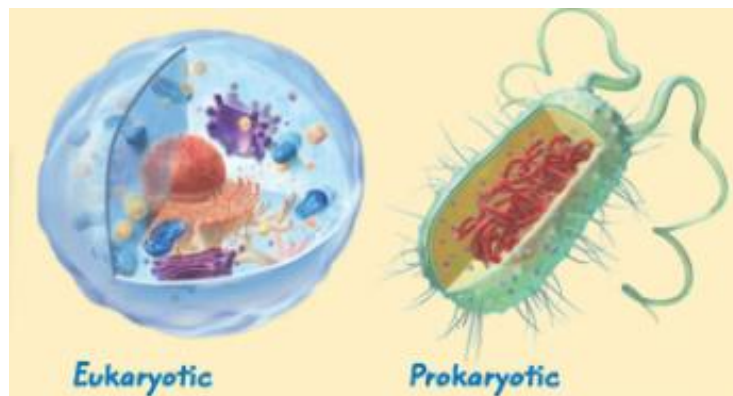
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28. Compare the function of the nucleus with something in everyday life?

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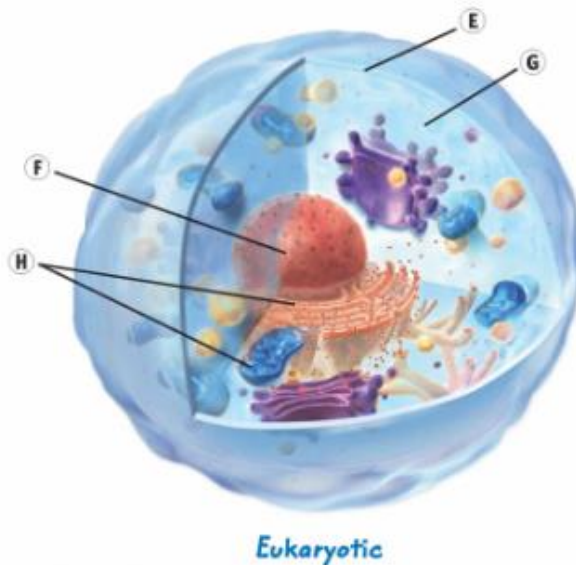
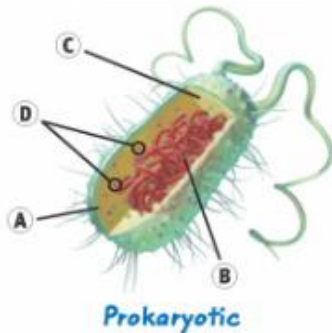


## What Are the Two Types of Cells? Page 211

29. There are two types of cells. Although cells have some basic parts in common, what is the main difference between these two cells? \_\_\_\_\_
30. List the characteristics of a prokaryotic cell:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
31. List the characteristics of a eukaryotic cell:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
32. Which cells have a cell membrane and cytoplasm? \_\_\_\_\_
33. Which cells have genetic material? \_\_\_\_\_
34. Which cells have a nucleus? \_\_\_\_\_
35. Which cells are smaller? \_\_\_\_\_
36. What is the main difference between a prokaryotic and eukaryotic cell? \_\_\_\_\_
37. What type of cells make up bacteria? \_\_\_\_\_
38. What type of cells are plants and animals made up of? \_\_\_\_\_

**13 Identify** Use the list of terms below to fill in the blanks with the matching cell parts in each cell. Some terms are used twice.

DNA in cytoplasm  
DNA in nucleus  
Cytoplasm  
Cell membrane  
Organelles



A \_\_\_\_\_  
B \_\_\_\_\_  
C \_\_\_\_\_  
D \_\_\_\_\_

E \_\_\_\_\_  
F **DNA in nucleus**  
G \_\_\_\_\_  
H \_\_\_\_\_