

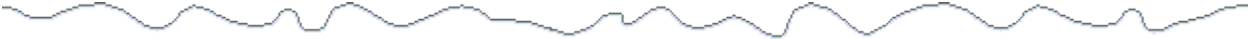


Organisms, Cell

Theory, and Organelles Study Guide

Use this study guide to prepare for your Unit 1 exam. You may use your notes to help you complete this guide. Keep in mind that for your test, you will need to prove your understanding of the following:

- 1. What makes an object an organism?**
- 2. Name the six traits that all living things must have.**
- 3. Recognize whether objects are living or nonliving.**
- 4. Summarize the three parts of the cell theory and their developers.**
- 5. Describe the functions of each cell organelle.**
 - a. cell membrane, nucleus and nucleolus, cytoplasm, mitochondria, endoplasmic reticulum (smooth and rough) , ribosome, lysosome, vacuole, chloroplast, cell wall, golgi body, centrioles
- 6. Label the parts of a cell.**
- 7. Compare and contrast plant cells with animal cells.**



1. What is an organism?

2. All living things must have these six traits

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____



3. Place a check mark next to the items that have all 6 qualities and therefore are considered organisms:

- | | | |
|--------------------|-------------------|----------------------|
| ___ drinking glass | ___ blueberries | ___ dill pickles |
| ___ football | ___ cake batter | ___ cotton tee shirt |
| ___ flu virus | ___ wicker basket | ___ doll |
| ___ fire | ___ butter | ___ water |

4. CELL THEORY

- All living things are made of _____.
- The _____ is the basic unit of _____.
- All _____ come from other _____.

5. Briefly describe the contributions of these scientists made to our understanding of cells:

- a. Robert Hooke

- b. Hans and Zacharias Janssen

- c. Anton van Leeuwenhoek

- d. Matthias Schleiden

- e. Theodor Schwann



f. Rudolf Virchow

g. Robert Remak*

6. a: What is an organelle? _____

6. b: Describe the functions of the following organelles:

c. Cell membrane- _____

D. Cytoplasm- _____

E. Nucleus- _____

F. Nucleolus _____

G. Mitochondria- _____

H. Endoplasmic reticulum- _____

I. Ribosome- _____

J. Lysosome - _____

K. Vacuole - _____

L. Chloroplast- _____

M. Cell wall- _____

N. Golgi body- _____

O. Centrioles- _____

7. Using the Venn Diagram, compare and contrast plant and animal cells.

