



Lesson: Cell Theory

Name:

Teacher:

Date:

Cell Theory Worksheet

Instructions: Choose the best answer for each question. Use your observations, knowledge from class, and the Cell Theory article to help you answer.

1. Which of the following is NOT a principle of cell theory?

- a. All living organisms are made of one or more cells
- b. The cell is the basic unit of life
- c. Cells can appear spontaneously without pre-existing cells
- d. All cells come from pre-existing cells

Answer: _____

2. Who was the first scientist to observe cells under a microscope?

- a. Anton van Leeuwenhoek
- b. Matthias Schleiden
- c. Robert Hooke
- d. Rudolf Virchow

Answer: _____

3. What did Rudolf Virchow contribute to cell theory?

- a. Observed living cells like bacteria
- b. Stated that all cells come from pre-existing cells

- c. Named cells after monastery rooms
- d. Discovered DNA in cells

Answer: _____

4. What is the smallest unit of life that can perform all necessary life functions?

- a. Tissue
- b. Organ
- c. Cell
- d. Organ system



Answer: _____

5. Which statement explains why cells are important in understanding diseases?

- a. Cells cannot reproduce
- b. Problems at the cellular level can cause diseases like cancer
- c. Cells are only found in plants
- d. Cells are too small to affect health

Answer: _____

6. Which organelle controls the cell's activities and contains DNA?

- a. Cell membrane
- b. Nucleus
- c. Cytoplasm
- d. Mitochondria

Answer: _____

7. Which of the following best describes plant cells compared to animal cells?

- a. Plant cells have a cell wall and chloroplasts, animal cells do not
- b. Plant cells have no nucleus
- c. Animal cells have a cell wall
- d. Plant cells are smaller than animal cells

Answer: _____

8. How do scientists use cell theory in biotechnology?

- a. To build bridges
- b. To create genetic engineering and stem cell therapies
- c. To measure air pressure
- d. To make magnets

Answer: _____

9. Which part of the cell provides energy for cellular activities?

- a. Nucleus
- b. Cytoplasm
- c. Mitochondria
- d. Ribosomes

Answer: _____



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10. Why is it helpful to explore cells and cell systems on a separate page?

- a. To learn about specialized cells and organ systems in more detail
- b. To memorize all organelle names without understanding
- c. To avoid learning about human biology
- d. To study cells without using microscopes

Answer: _____

Answer Key – Cell Theory Free Worksheet

- 1. c
- 2. c
- 3. b
- 4. c
- 5. b
- 6. b
- 7. a
- 8. b
- 9. c
- 10. a