



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 monastary 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: \_\_\_\_\_



**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