

Name: _____

Date: _____

Cell Division Science Worksheet

TOPIC: CELL DIVISION

Instructions: Choose the best answer for each question.

1. What is the main purpose of cell division in multicellular organisms?

- A) To produce energy
 - B) To grow, repair, and reproduce cells
 - C) To create different types of cells
 - D) To eliminate waste products
-

2. Which process results in the formation of two identical daughter cells?

- A) Meiosis
 - B) Binary fission
 - C) Mitosis
 - D) Fertilization
-

3. What is the name of the phase where a cell spends most of its life, growing and preparing for division?

- A) Cytokinesis
 - B) Prophase
 - C) Interphase
 - D) Anaphase
-

4. During which phase of mitosis do chromosomes align in the center of the cell?

- A) Anaphase
 - B) Metaphase
 - C) Telophase
 - D) Prophase
-

5. In which type of cell division do cells reduce their chromosome number by half to form gametes?

- A) Mitosis
- B) Meiosis
- C) Cytokinesis
- D) Binary fission

6. Which of the following is NOT a stage of mitosis?

- A) Telophase
 - B) Cytokinesis
 - C) Prophase
 - D) Metaphase
-

7. What happens during anaphase of mitosis?

- A) Chromosomes condense and become visible
 - B) Chromosomes are pulled apart to opposite sides of the cell
 - C) The nuclear membrane dissolves
 - D) The cell prepares to split into two
-

8. What is the end result of meiosis?

- A) Two identical cells with the same number of chromosomes
 - B) Four genetically unique cells with half the number of chromosomes
 - C) Two genetically unique cells with half the number of chromosomes
 - D) Four identical cells with the same number of chromosomes
-

9. What is cytokinesis?

- A) The division of the cell's nucleus
 - B) The division of the cell's cytoplasm
 - C) The replication of DNA
 - D) The alignment of chromosomes
-

10. Why is meiosis important for sexual reproduction?

- A) It produces genetically identical cells
 - B) It creates variation in offspring by forming genetically different gametes
 - C) It ensures that offspring have twice as many chromosomes
 - D) It allows organisms to reproduce asexually
-

Answer Key:

1. B
2. C
3. C
4. B
5. B
6. B
7. B
8. B
9. B
10. B