

Module 07 Quiz: Mitosis

Name: _____ Date: _____

Part A: Multiple Choice (7 points)

Choose the best answer for each question. (1 point each)

1. DNA is replicated during which phase of the cell cycle?
 2. A) G1
 3. B) S phase
 4. C) G2
 5. D) Mitosis
6. The correct order of mitosis phases is:
 7. A) Metaphase, Prophase, Anaphase, Telophase
 8. B) Prophase, Metaphase, Anaphase, Telophase
 9. C) Prophase, Anaphase, Metaphase, Telophase
10. D) Telophase, Anaphase, Metaphase, Prophase
11. During which phase do chromosomes line up along the middle of the cell?
 12. A) Prophase
 13. B) Metaphase
 14. C) Anaphase
15. D) Telophase
16. Sister chromatids are separated during:
 17. A) Prophase
 18. B) Metaphase

19. C) Anaphase

20. D) Telophase

21. Mitosis produces:

22. A) Four genetically different cells

23. B) Two genetically identical cells

24. C) Four genetically identical cells

25. D) Two genetically different cells

26. The purpose of cell cycle checkpoints is to:

27. A) Speed up cell division

28. B) Ensure the cell is ready to proceed

29. C) Increase genetic variation

30. D) Prevent crossing over

31. The division of the cytoplasm is called:

32. A) Mitosis

33. B) Cytokinesis

34. C) Interphase

35. D) Meiosis

Part B: Free Response (3 points)

Answer each question in complete sentences.

1. (1 point) Describe what happens during prophase of mitosis.

1. (1 point) Why is mitosis important for growth and repair in multicellular organisms?

1. (1 point) Explain how problems with cell cycle regulation can lead to cancer.
