

Cell cycle and Mitosis Quiz

Question 1: What is the name of the structure that holds the two sister chromatids together in a chromosome?

- A) Centriole
- B) Centromere
- C) Spindle fibre
- D) Kinetochores

Question 2: In which phase of the cell cycle does DNA replication occur?

- A) G1 phase
- B) S phase
- C) G2 phase
- D) M phase

Question 3: What is the name for the group of proteins responsible for regulating the cell cycle?

- A) Steroids
- B) Cyclins
- C) Centrioles
- D) Hormones

Question 4: Which of the following is not directly required for protein synthesis?

- A) Transcription
- B) Replication
- C) Translation
- D) Ribosomes

Question 5: Which of the following is the most accurate snapshot of a sequence of events in the cell cycle?

- A) Interphase, Mitosis, G1
- B) S, G2, Prophase and Telophase
- C) Replication, G2, Prophase and Metaphase
- D) Metaphase, Telophase, Cytokinesis, and interph

Question 6: What is the main difference between cytokinesis in animal cells and plant cells?

- A) Animal cells form a cell plate, while plant cells form a cleavage furrow
- B) Animal cells form a cleavage furrow, while plant cells form a cell plate
- C) Animal cells divide by binary fission, while plant cells divide by mitosis
- D) Animal cells divide by mitosis, while plant cells divide by binary fission

References

Q1: Rogers, Kara. "chromatid". Encyclopedia Britannica, 15 Feb. 2023, <https://www.britannica.com/science/chromatid>. Accessed 17 February 2023.

Q2: [Cell Cycle \(genome.gov\)](#)

Q3: Simmons, Hannah. "What Are Cyclins?". *News-Medical*. 17 February 2023. <<https://www.news-medical.net/life-sciences/What-Are-Cyclins.aspx>>.

Q4: [Protein Synthesis Steps - Protein Synthesis](#)

Q5: [Cell Cycle \(genome.gov\)](#)

Q6: [Difference Between Plant and Animal Cell Division | Characteristics, Phases, Comparison \(pediaa.com\)](#)