



## CHAPTER 5: CELL DIVISION



### Mitosis

- When is the DNA of a cell replicated?
  - Prophase
  - Anaphase
  - Interphase
  - Metaphase
- Which of the following are stages of mitosis?
  - Interphase
  - Prophase
  - Anaphase
  - Telophase
  - I, II and III
  - I, II and IV
  - II, III and IV
  - I, III and IV
- The following information is about prophase of mitosis.

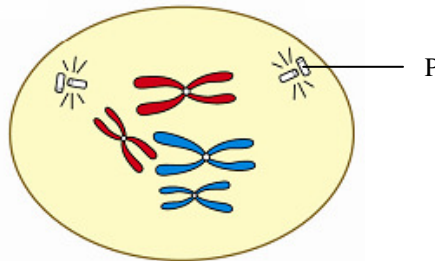
In prophase, the nuclear membrane of the cell disappears.

The information is...

- false; it occurs during late interphase.
  - false; it is not associated with prophase.
  - true, and it occurs during late prophase.
  - true, and it occurs during early prophase.
- Which of the following about mitosis is **true**?
    - Following telophase, the nucleolus reappears
    - During late metaphase, the centromeres divide
    - During interphase there is little cellular activity
    - The chromosomes shorten and thicken during prophase
    - I and III
    - I and IV
    - II and III
    - II and IV

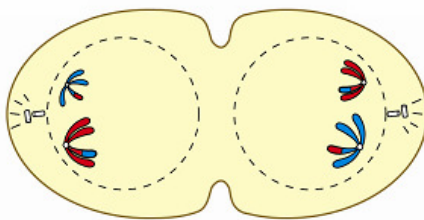
5. Which of the following gives the correct chronological order of mitosis?
- A Metaphase, anaphase, telophase, prophase
  - B Prophase, metaphase, anaphase, telophase
  - C Anaphase, prophase, metaphase, telophase
  - D Interphase, prophase, metaphase, anaphase, telophase

Questions 6 and 7 refer to the diagram shown below.

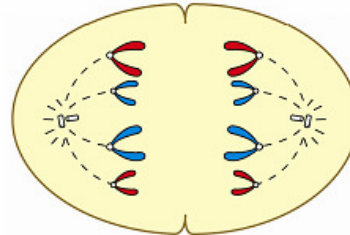


6. What is the function of the part labelled P?
- A For DNA replication
  - B To cause cytokinesis
  - C To hold the two daughter chromatids together at the centromere
  - D To produce spindle fibres to guide the chromosomes to the opposite poles
7. Which of the following concerning the cell shown in the above diagram are true?
- I There are eight chromatids
  - II There are four chromosomes
  - III There are eight chromosomes
  - IV The cell is in metaphase of mitosis
- A I, II and III
  - B I, II and IV
  - C II, III and IV
  - D I, III and IV
8. Which of the following diagrams does **not** show a stage of mitosis?

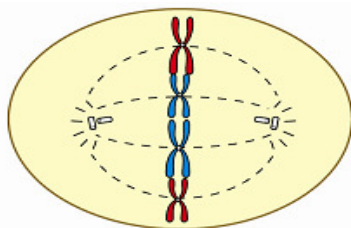
A



B



C



D

