

Review I: The Cell Cycle

Part I: Match each statement with one of the choices below:

A: anaphase **B:** metaphase **C:** prophase **D:** telophase **E:** interphase **F:** cytokinesis

- ___ 1. Period during which the cell carries out its usual metabolic activities
- ___ 2. The nuclear membrane and nucleoli disappear
- ___ 3. Chromatin coils up to form double stranded chromosomes which are joined in the center by a centromere
- ___ 4. Centromeres break and chromosomes begin migration toward opposite poles of the cell
- ___ 5. The nuclear membrane and nucleoli reappear
- ___ 6. Cell plate develops across the center of a plant cell forming a new cell
- ___ 7. The greatest portion of a cell's life are in this phase
- ___ 8. Cell membrane pinches in the middle of the cell dividing cytoplasm into two new cells
- ___ 9. The spindle forms through the migration of the centrioles
- ___ 10. Chromatin material replicates
- ___ 11. Chromosomes attach to the spindle fibres
- ___ 12. Chromosomes align on the equator of the spindle
- ___ 13. Complete set of chromosomes are now at each pole
- ___ 14. The cell begins to pinch together along the centre.
- ___ 15. Two nuclei are present in the cell
- ___ 16. The nuclear membrane is absent during **these phases**

Part II: Complete the following table to summarize what happens during the three stages of the cell cycle:

Phase	Events
interphase	
mitosis	
cytokinesis	

Part III: Prepare a table to compare prophase and telophase in mitosis.