

The Cell Cycle

Biology Essential Standard: 1.2.2

Analyze how cells grow and reproduce in terms of interphase, mitosis, and cytokinesis

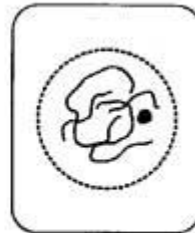
Observe the following diagrams of cells in different stages of the cell cycle:



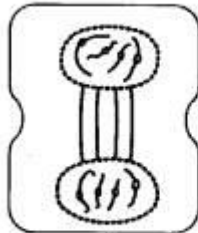
A



B



C



D



E

1. Decide if the sequence shown above is the correct sequence for the stages of the cell cycle and give a reason for your answer.
2. If the sequence shown above is NOT correct, re-draw the diagrams in the correct sequence and defend your sequence.
3. Once you have decided on the correct sequence for the stages of the cell cycle, apply the following terms in order to describe what is occurring at each stage of the cell cycle:
Chromosomes, chromatids, nucleus, spindle fibers, metaphase, interphase, telophase, anaphase, prophase
4. Explain why this process is necessary for the growth of a multicellular organism.