

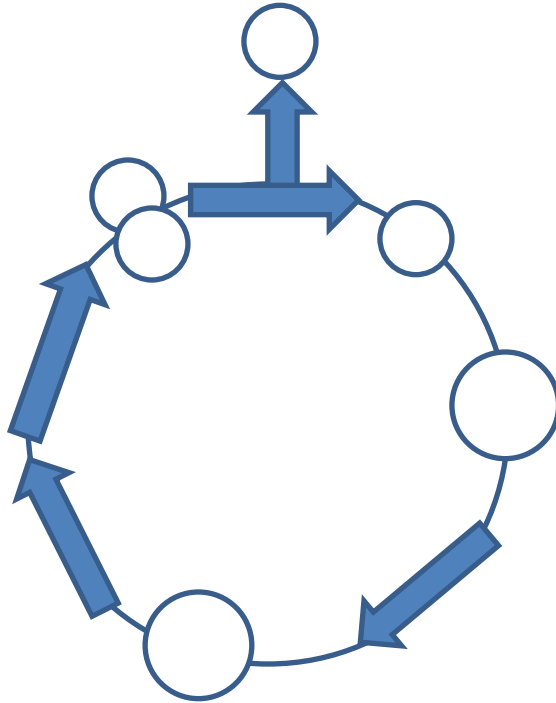
THE CELL CYCLE AND CELL DIVISION

(pg. 40-42, Nelson Science Perspectives 10)

THE CELL CYCLE

As _____ cells grow and divide, they move through _____ distinct stages. These stages make up what is known as the _____. The stages of the cell cycle are _____, _____ and _____. Cells grow and prepare to _____ during interphase. Cell division occurs during _____ and cytokinesis.

Add labels from Figure 1 pg. 40



The length of time it takes to complete one cycle varies. _____ cells divide rapidly. Some of your body cells may take as much as _____ for a cycle. Very specialized cells, such as adult _____ cells, may never divide at all.

INTERPHASE

Interphase is the _____ stage for most cells, but it is not a _____ stage. During interphase, the cell is carrying out all life activities except _____. These activities include _____, cellular _____, and any specialized functions of that cell type. During this stage, the _____ material, DNA (_____) is in very long, thin, invisible strands. When the cell prepares for cell division, the strands are _____ so that there are two _____ strands of the genetic material. More _____ are also formed.

CELL DIVISION

Cell division occurs in two stages: _____ - the division of the contents of the _____ - and _____ - the division of the rest of the cell, such as _____ and cell membrane. Each cell division produces two _____ identical _____ cells. Mitosis is composed of four phases: _____, _____, _____, and _____ (____). The cells move gradually from one _____ to the next.

PROPHASE (student make notes)

METAPHASE (student make notes)

ANAPHASE (student make notes)

TELOPHASE (student make notes)

CYTOKINESIS (student make notes)
