The Cell Cycle and Mitosis
Review

Name KEY
Date _____

The Cell Cycle

The cell cycle, or cell-division cycle, is the series of events that take place in a eukaryotic cell between its formation and the moment it replicates itself. These events can be divided in two main parts: interphase (in between divisions phase grouping G_1 phase, S phase, G_2 phase), during which the cell is forming and carries on with its normal metabolic functions: the mitotic phase (M mitosis), during which the cell is replicating itself. Thus, cell-division cycle is an essential process by which a single-cell fertilized egg develops into a mature organism and the process by which hair, skin, blood cells, and some internal organs are formed.

1. What is meant by the cell cycle or cell division cycle?
   events that take place in a eukaryotic cell between its formation and the moment it replicates itself

2. In what type of cells --prokaryotes or eukaryotes – does the cell cycle occur?
   eukaryotic cell

3. Name the 2 main PHASES of the cell cycle!
   interphase, mitotic phase (M mitosis)

4. interpahase is in between the times when a cell is dividing.

5. What is occurring in a cell during the interphase ?
   the cell is forming and carries on with its normal metabolic functions

6. What is occurring during the mitosis phase?
   the cell is replicating itself

7. Sketch and label ***replicated chromosomes***. Label: sister, chromatids, and centromere