

Name:

Date:

## Mitosis vs. Meiosis

Review the processes of mitosis and meiosis, then fill in the charts below. Keep in mind that the stages of cell division were first recognized from examinations of fixed slides of tissues undergoing division. On fixed slides, cells are captured or frozen at particular points in the division cycle. Using these static slides, early microscopists identified specific arrangements or patterns of chromosomes that occurred at various stages of the cycle and gave these stages names (e.g. interphase, anaphase, etc.). Later work using time-lapse photography made it clear that mitosis and meiosis are continuous processes. Once division begins, the chromosomes move fluidly from one phase to the next.

1. What events occur during each phase of mitosis and meiosis?

	<b>Interphase</b>	<b>Prophase</b>	<b>Metaphase</b>	<b>Anaphase</b>	<b>Telophase &amp; Cytokinesis</b>
<b>Mitosis</b>	ex: <i>G<sub>1</sub>- Cell Growth</i>  <i>S- DNA Duplication</i>  <i>G<sub>2</sub>- Cell Growth, Proofreading.</i>		ex: <i>Duplicated chromosomes, each with two sister chromatids line up independently on the metaphase plate.</i>		
<b>Meiosis I</b>					
<b>Meiosis II</b>					