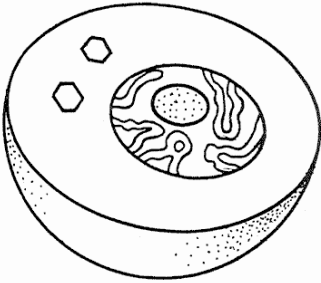
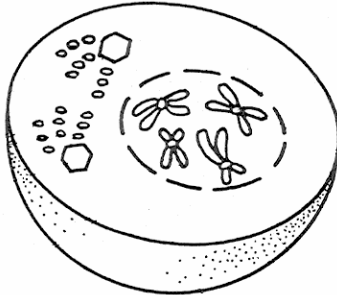
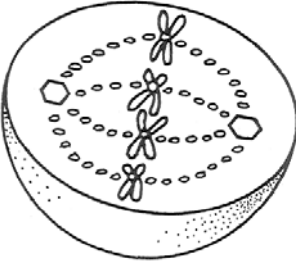
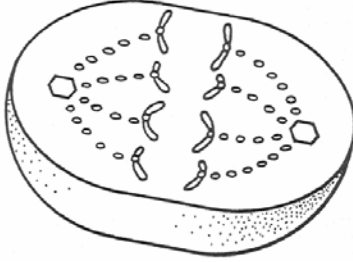
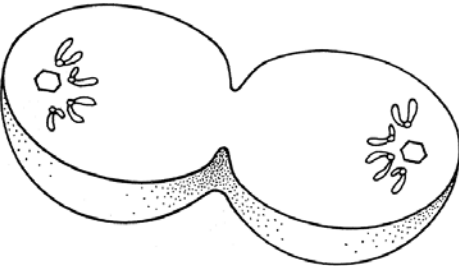
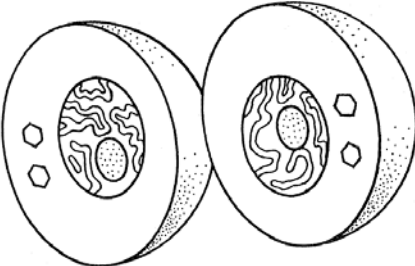


The cell cycle is an ordered set of events, resulting in cell growth and division into two daughter cells.

- In multicellular organisms individual cells grow and then divide via a process called mitosis
- Organisms begin as a single cell (fertilized egg) that divides successively to produce many cells

Key Vocabulary	Assignments	Due Date
<p>Anaphase</p> <p>Cell Cycle</p> <p>Cell Plate</p> <p>Centromere</p> <p>Cytokinesis</p> <p>Daughter Cells</p> <p>Interphase</p> <p>Metaphase</p> <p>Mitosis</p> <p>Prophase</p> <p>Spindle Fiber</p> <p>Spontaneous Generation</p> <p>Telophase</p>	<p>#1 - Read pages 135 to 138</p> <p>a. Draw and label the following stages of the cell cycle:</p> <ol style="list-style-type: none"> 1. Interphase 2. Prophase 3. Metaphase 4. Anaphase 5. Telophase 6. Cytokinesis <p>#2 – Bonus question (5 points)</p> <p>a. Define the key vocabulary</p>	

The Cell Cycle and Mitosis

The Cell Cycle		Mitosis	Replication of DNA
The cell cycle is an ordered set of events including Interphase and Mitosis.		Mitosis is the division of the nucleus plus cytokinesis, and produces two identical daughter cells.	
Interphase		Prophase	
			
Metaphase		Anaphase	
			
<p>Spindle fibers align the chromosomes along the middle of the nucleus. This organization helps to ensure that in the next phase each new nucleus will receive one copy of each chromosome.</p>			
Telophase		Cytokinesis and Daughter Cells	
			
<p>In animal cells cytokinesis results in two daughter cells, each with one nucleus. In plant cells a cell plate forms between the two daughter cells.</p>			
Centrioles	Spindle fibers	Spontaneous Generation	
		<p>Francesco Redi- Hypothesized that maggots developed from eggs laid by flies. Conducted one of the first controlled experiments, placing meat in flasks, some open, some sealed and others covered with mesh. Maggots appeared only in the open flasks in which the flies could reach the meat and lay eggs</p>	