

Unit 4 Guide for Students-Part 2

Key Content Vocabulary	Key Understandings & Guiding Questions	Higher Level Thinking Application	Textbook Correlation
<p>Cell cycle Cleavage furrow Cell plate Meiosis Mitosis Cytokinesis Interphase Chromosomes Prophase Metaphase Anaphase Telophase Cyclins Gametes Haploid Crossing over Chromatids Independent Assortment G1,G2,S,M Chromatin DNA Replication Spindle Apparatus nuclear envelope radiating fibers</p>	<p><i>Organisms can reproduce asexually or sexually in order to grow, repair tissue, and/or continue the species.</i></p> <p>— How does mitosis result in genetically identical daughter cells?</p> <p>— What is the significance of preserving chromosome number in mitosis?</p> <p>— How does meiosis result in genetically unique daughter cells?</p> <p>— What is the significance of reducing chromosome number in meiosis?</p>	<p>Compare and Contrast Meiosis & Mitosis</p> <p>Cell Division</p> <ol style="list-style-type: none"> 1. The nerve cells in the human nervous system undergo mitosis. Based on this information, explain why complete recovery from injuries to the nervous system may not occur. 2. Describe the difference between cell division in an animal cell and cell division in a plant cell. 3. Write a hypothesis about what you think would happen if cyclin were injected into a cell that was in mitosis. 	<p>Chapter 10-Cell Growth & Division Pg. 275-278</p> <p>Chapter 11/4 - Meiosis</p>

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Key Process Vocabulary	Activity/ Notes/ Lab Correlation	TEKS Correlation	Online Supplemental
	Cell Reproduction PP Chapter 10 Vocab Review pg. 122-123 Chapter 10 Concept Map pg. 125 Chapter 10 Guided Reading pg. 265-270 Mitosis squares Act (LAB) Chapter 11 Guided Reading pg. 278 Mitosis Microscope Slides	B.5 Describe the stages of the cell cycle, including deoxyribonucleic acid (DNA) replication and mitosis, and the importance of the cell cycle to the growth of organisms B.6G Recognize the significance of meiosis to sexual reproduction	