

7TH GRADE SCIENCE LONG RANGE PLANS 2006-2007

1st Six Weeks	Curriculum Standards	Resources
Weeks 1, 2, & 3	❖ Introduction	Chapter 1 <i>What is Science</i>
Weeks 4 & 5	❖ Determine the measurable properties of matter and appropriate metric units (i.e., weight, mass, volume, density, size, length, width, height, & temperature.	Chapter 2 <i>Measurement</i>
Week 6	<ul style="list-style-type: none"> ❖ Determine how temperature, affects evaporation & condensation in the atmosphere. ❖ Identify the detailed features of the water cycle given a diagram (i.e., evaporation, condensation precipitation runoff, & transpiration. 	Chapter 15 <i>The Atmosphere in Motion</i> (8 th grade text) Windows on Science Prentice Hall - Earth's Weather

2nd Six Weeks	Curriculum Standards	Resources
Week 1	<ul style="list-style-type: none"> ❖ Determine how temperature, affects evaporation & condensation in the atmosphere. ❖ Identify the detailed features of the water cycle given a diagram (i.e., evaporation, condensation precipitation runoff, & transpiration). 	<p>Chapter 15 <i>The Atmosphere in Motion</i> (8th grade text) Windows on Science Prentice Hall - <i>Earth's Weather</i></p>
Weeks 2 & 3	<ul style="list-style-type: none"> ❖ Analyze data & make predictions about weather given a scenario. ❖ Interpret weather data using a weather map. ❖ Explain the impact of catastrophic events in climate (e.g., volcanic eruption) 	<p>Windows on Science Prentice Hall - <i>Earth's Weather</i></p>
Weeks 4 & 5	<ul style="list-style-type: none"> ❖ Determine the relationships among cells, tissue, organs, & systems given a diagram and identify the function of organ systems. ❖ Recognize basic structures that most cells share (i.e., nucleus, cytoplasm, and cell membrane. ❖ Distinguish between plant & animal cells. ❖ Identify major organelles and their functions. 	<p>Chapter 3 <i>Cells</i></p>
Week 6	<ul style="list-style-type: none"> ❖ Predict the movement of substances through osmosis or diffusion across the cell membrane, given solutions of different concentrations. 	<p>Chapter 4 <i>Cell Processes</i> (approximately 7 sessions)</p>

3rd Six Weeks	Curriculum Standards	Resources
Week 1	<ul style="list-style-type: none"> ❖ Predict the movement of substances through osmosis or diffusion across the cell membrane, given solutions of different concentrations. 	Chapter 4 <i>Cell Processes</i> (approximately 7 sessions)
Week 2	<ul style="list-style-type: none"> ❖ Determine what plants need to make food. ❖ Identify photosynthesis as the food making process in plants. ❖ Identify the reactants and products of photosynthesis and respiration. 	Chapter 5 <i>Plant Processes</i> (5 sessions)
Week 3	<ul style="list-style-type: none"> ❖ Determine what plants need to make food. ❖ Identify photosynthesis as the food making process in plants. ❖ Identify the reactants and products of photosynthesis and respiration. ❖ Associate the processes of photosynthesis & respiration with the appropriate organelles. ❖ Select the structures animals need to obtain oxygen. ❖ Classify animals according to their means of obtaining oxygen. 	Chapter 6 <i>Photosynthesis & Respiration</i> (5 sessions)
Week 4	<ul style="list-style-type: none"> ❖ Sequence a series of diagrams depicting the movement of chromosomes during mitosis. 	Chapter 8 <i>Cell Reproduction</i> Section 1 – <i>Cell division and Mitosis</i> Section 3 DNA(5 sessions)
Weeks 5 & 6	<ul style="list-style-type: none"> ❖ Match a flower part with its reproductive function. ❖ Distinguish between asexual & sexual methods of reproduction. ❖ Recognize advantages and disadvantages of sexual and asexual reproductions. ❖ Recognize a variety of pollination methods and associated floral adaptations. 	Chapter 9 <i>Plant Reproduction</i> (8 sessions)

4th Six Weeks	Curriculum Standards	Resources
Weeks 1 & 2	<ul style="list-style-type: none"> ❖ Distinguish between sexual & asexual methods of reproduction. ❖ Recognize that genetic information is passed from parent to offspring during reproduction. 	Chapter 10 <i>Regulation & Reproduction</i> (7 sessions)
Weeks 3 & 4	<ul style="list-style-type: none"> ❖ Select the illustrations that depict the movement of oxygen and carbon dioxide between living things and their environment. ❖ Interpret a diagram depicting the oxygen-carbon dioxide cycle. 	Chapter 13 <i>Interactions of Life</i> (7 sessions)
Week 5	<ul style="list-style-type: none"> ❖ Distinguish between elements, compounds, & mixtures. ❖ Classify substances as elements, compounds, & mixtures. 	Introduce Periodic Table (Supplemental—may move this to earlier in the year)
Week 6	<ul style="list-style-type: none"> ❖ Distinguish between elements, compounds, & mixtures. ❖ Classify substances as elements, compounds, & mixtures. 	Chapter 18 <i>Matter</i> (7 sessions)

5th Six Weeks	Curriculum Standards	Resources
Week 1	<ul style="list-style-type: none"> ❖ Distinguish between elements, compounds, & mixtures. ❖ Classify substances as elements, compounds, & mixtures. 	Chapter 18 <i>Matter</i> (7 sessions)
Weeks 2 & 3	<ul style="list-style-type: none"> ❖ Describe particle arrangement associated with different states of matter. (D) ❖ Compare the motion and arrangement of molecules in solids, liquids, & gases. 	Chapter 19 <i>Properties & Changes of Matter</i> (8 sessions) Supplemental for molecules arrangement in different states of matter.
Week 4	<ul style="list-style-type: none"> ❖ Review for T-CAP 	
Week 5	<ul style="list-style-type: none"> ❖ Review For T-CAP 	
Week 6	<ul style="list-style-type: none"> ❖ T-CAP Testing ❖ Review when possible 	

6th Six Weeks	Curriculum Standards	Resources
Weeks 1, 2, & 3	<ul style="list-style-type: none"> ❖ Identify Earth's major biomes. ❖ Identify biotic & abiotic factors. ❖ Choose the appropriate environment for an organism, given a description. (8 th grade standards)	Chapter 12 <i>The Non-living Environment</i> Supplemental material Prentice Hall - Ecology
Weeks 5 & 6	<ul style="list-style-type: none"> ❖ Describe the natural defenses your body has against disease. ❖ Explain the difference between antigen & antibody. ❖ Explain how the body produces antibodies. ❖ Explain how a virus works. 	8 th grade book –chapter 9 <i>Immunity & Disease</i>