

## Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Science Safety, Lab Equipment, Metric System, and the Scientific Method	Eighth	1 <sup>st</sup> Six Weeks	3 Weeks
TEKS/Student Expectations		Examples/Specifications:	
<p>(1)</p> <p>(A) demonstrate safe practices during field and laboratory investigations; and</p> <p>(B) make wise choices in the use and conservation of resources and the disposal or recycling of materials.</p> <p>(2)</p> <p>(A) plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting and using equipment and technology;</p> <p>(B) collect data by observing and measuring;</p> <p>(C) organize, analyze, evaluate, make inferences, and predict trends from direct and indirect evidence;</p> <p>(D) communicate valid conclusions; and</p> <p>(E) construct graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate data.</p> <p>(3)</p> <p>(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;</p> <p>(B) draw inferences based on data related to promotional</p>		<p>1 A and B- discuss rules and expectations in the laboratory and discuss the proper use and disposal of all materials in the lab</p> <p>2 A, B, C, D, and E- discuss the proper scientific method and proper way to document all lab reports, include graphs</p> <p>3 A,B, and D- have students discuss what a hypothesis and theories and how we can go about proving these</p> <p>4 A- go over all lab equipment that is available and have students take a test or quiz over the equipment</p> <p>4 B- take students through a mock lab and lead them through a prediction period, meaning students will need to make predictions based on the information that the teacher provides</p> <p>5 A,B, and C- during all labs have students answer the question “was the experiment flawed or is there a better way to test the hypothesis,” allow students to work together to find a better way</p>	

<p>materials for products and services;</p> <p>(D) evaluate the impact of research on scientific thought, society, and the environment; and</p> <p>(4)</p> <p>(A) collect, record, and analyze information using tools including beakers, petri dishes, meter sticks, graduated cylinders, weather instruments, hot plates, dissecting equipment, test tubes, safety goggles, spring scales, balances, microscopes, telescopes, thermometers, calculators, field equipment, computers, computer probes, water test kits, and timing devices; and</p> <p>(B) extrapolate from collected information to make predictions.</p> <p>(5)</p> <p>(A) identify a design problem and propose a solution;</p> <p>(B) design and test a model to solve the problem; and</p> <p>(C) evaluate the model and make recommendations for improving the model.</p>	
<p><b>Language of Instruction:</b></p>	<p><b>Instructional Resources/Textbook Correlations:</b></p>
<p>Meter, liter, gram, all lab equipment, theory, purpose, hypothesis, experiment, analysis, data, conclusion, observation</p>	<p>Textbook pg 10-21</p>

	<b>Weblinks/Other Resources:</b>
<b>Evaluation/External Assessment/Local Assessment:</b>	<b>Best Instruction Timeline:</b>
<p>Teacher Test  All lab reports will be a way to evaluate if the students understand the material taught</p>	<p>4 days- Lab equipment and practices  4 days- Metric system and conversions within the metric system  2 days- Scientific Method  2 days- Peanut Butter and Jelly Lab- writing a procedure  3 days- Writing a proper lab report, graphing, and making corrections to labs</p>