

## Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
PreAP Chemistry Unit 1 - Measurement	10 – 12	1 <sup>st</sup> cycle	12 days
TEKS/Student Expectations		Examples/Specifications:	
<p>1A - demonstrate safe practices during field and laboratory investigations</p> <p>1B - make wise choices in the use and conservation of resources and the disposal or recycling of materials</p> <p>2A - plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology</p> <p>2B - collect data and make measurements with precision</p> <p>2C - express and manipulate chemical quantities using scientific conventions and mathematical procedures such as dimensional analysis, scientific notation, and significant figures</p> <p>2D - organize, analyze, evaluate, make inferences, and predict trends from data</p> <p>2E - communicate valid conclusions</p> <p>3A - analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information</p> <p>3B - make responsible choices in selecting everyday products and services using scientific information</p> <p>3C - evaluate the impact of research on scientific thought, society, and the environment</p>	<p>1A &amp; B – using provided safety guidelines, demonstrate how to conduct lab experiments safely and follow instructor guidelines regarding appropriate disposal of materials.</p> <p>2A – recognize and choose the correct lab equipment for a procedure using the identification lab activity.</p> <p>2B &amp; C– using the metric system, demonstrate how to measure quantities such as volume, mass, and length to the correct number of significant digits using scientific notation as appropriate. Convert between units and round to the correct number of digits when reporting a calculated answer.</p> <p>2D &amp; E – apply the steps of the scientific method to a problem both in written practice and through an inquiry lab investigation with special emphasis placed on variables, constants, and controls.</p> <p>3A – compare the concepts of the hypothesis, law, and theory</p> <p>3B – read product labels through lab investigations and use the MSDS guides correctly</p> <p>3C – identify ways that the scientific method is useful in everyday life and the benefits of continued scientific study to society</p>		

4C - investigate and identify properties of mixtures and pure substances		4C – determine the density of an unknown substance and demonstrate collective skill in measurement, safety, science process, and calculation through the lab activity including percent error calculation
<b>Language of Instruction:</b>		<b>Instructional Resources/Textbook Correlations:</b>
Material Safety Data Sheet Safety Equipment Laboratory Equipment Scientific Method Hypothesis Inference Observation Scientific law Scientific theory Dependent variable Independent variable	Metric system prefixes Scientific notation Significant digit Density Percent error Qualitative Quantitative Control Constant Experiment Conclusion	Glencoe Chemistry: Matter and Change – chapters 1 and 2 Equipment identification lab Measurement lab Scientific method lab Density and percent error lab
		<b>Weblinks/Other Resources:</b>
<b>Evaluation/External Assessment/Local Assessment:</b>		<b>Best Instruction Timeline:</b>
TAKS test (1.1A, 1.2 A – D, 1.3A – B, 4.7A) Teacher-designed test Laboratory reports and performance Quizzes Daily work Homework		2 days – course expectations, safety procedures, skills pretest 1 day – equipment identification lab 2 days – scientific method and lab 5 days – metric measurement and labs 2 days – review and assessment