

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Chemistry Unit 1 - Measurement	10 – 12	1 st 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 & B – using provided safety guidelines, the student will demonstrate how to conduct lab experiments safely and follow instructor guidelines regarding appropriate disposal of materials.</p> <p>2A – the student will be able to recognize and choose the correct lab equipment for a procedure using the identification lab activity</p> <p>2B & C– using the metric system, the student will demonstrate how to measure quantities such as volume, mass, and length to the correct number of significant digits using scientific notation as appropriate. The student will be able to convert between units and round to the correct number of digits when reporting a calculated answer.</p> <p>2D & E – the student will 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 – the student will be able to compare the concept of the hypothesis, law, and theory</p> <p>3B – the student will learn to read product labels through lab investigations and to use the MSDS guides correctly</p> <p>3C – the student will identify ways that the scientific method is useful in everyday life and the benefits of continued scientific study to society</p>		

Language of Instruction:		Instructional Resources/Textbook Correlations:
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 Qualitative Quantitative Control Constant Experiment Conclusion	Glencoe Chemistry: Concepts and Applications – Appendix A Equipment identification lab Measure to correct significant digits lab Metric measurement lab Scientific method lab – observation and inference (chemlab 1)
		Weblinks/Other Resources:
Evaluation/External Assessment/Local Assessment:		Best Instruction Timeline:
TAKS test (1.1A, 1.2A-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