

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Chemistry Unit 17 – Acids and Bases	10 – 12	6 th cycle	8 days
TEKS/Student Expectations		Examples/Specifications:	
14A - analyze and measure common household products using a variety of indicators to classify the products as acids or bases		14A & B – identify the properties of acids and bases through lab investigation.	
14B - demonstrate the electrical conductivity of acids and bases			
14C - identify the characteristics of a neutralization reaction		14C – write neutralization reactions and use laboratory titrations to determine the concentration of unknown acids and bases.	
14D - describe effects of acids and bases on an ecological system		14D – calculate pH and pOH and relate the strength and concentration of acids and bases to common uses and environmental issues.	
1A - demonstrate safe practices during field and laboratory investigations.		1A & B – conduct lab experiments safely and follow instructor guidelines regarding appropriate disposal of materials.	
1B - make wise choices in the use and conservation of resources and the disposal or recycling of materials.			
2A - plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology		2A – use the scientific method when planning a controlled experiment, including the identification and selection of appropriate equipment, and the development of a suitable hypothesis.	
2B - collect data and make measurements with precision		2B & C– using the metric system, measure quantities to the correct number of significant digits using scientific notation as appropriate. Convert between units as needed and round to the correct number of digits when reporting a calculated answer.	
2C - express and manipulate chemical quantities using scientific conventions and mathematical procedures such as dimensional analysis, scientific notation, and significant figures			
2D - organize, analyze, evaluate, make inferences, and predict trends from data		2D & E – apply the steps of the scientific method to lab investigations.	
2E - communicate valid conclusions			

Language of Instruction:		Instructional Resources/Textbook Correlations:
Acid Acidic hydrogen Base Hydronium ion Ionization pH Neutralization reaction Indicator Salt		Glencoe Chemistry: Concepts and Applications – chapter 14 & 15 Acid/base properties lab Indicator and pH lab Titration lab
		Weblinks/Other Resources:
Evaluation/External Assessment/Local Assessment:		Best Instruction Timeline:
TAKS test (1.1A, 1.2A-D, 4.9B) Teacher-designed test Laboratory reports and performance Quizzes Daily work Homework		2 days – properties of acids and bases including lab 2 days – pH and indicators including lab study 2 days – neutralization and titration lab 2 days – review and assess