

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
PreAP Biology Unit 1 – Science of Biology	9	1 st Cycle	12 days
TEKS/Student Expectations		Examples/Specifications:	
<p>1A Students will demonstrate safe practices during field and laboratory investigation</p> <p>1B Students will make wise choices in the use and conservation of resources and the disposal or recycling of materials.</p> <p>2A Students will plan and implement investigative procedures</p> <p>2B Students will collect data and make measurements with precision;</p> <p>2C Students will organize, analyze, evaluate, make inferences, and predict trends from data;</p> <p>2D Students will communicate valid conclusions.</p> <p>3A Students will analyze, review, and critique scientific explanations, as to their strengths and weaknesses using scientific evidence and information;</p> <p>3D The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to describe connections between physics and chemistry.</p> <p>4B The student will investigate and identify cellular processes including homeostasis, permeability, energy production, transportation of molecules, disposal of wastes, function of cellular parts, and synthesis of new molecules.</p>		<p>Students will:</p> <ul style="list-style-type: none"> -Use controlled experiments to test hypotheses. -Use a controlled experiment to gather, graph, and interpret data. -Distinguish observations from inferences. -Distinguish between qualitative and quantitative observations. -Use laboratory equipment properly. -Exhibit safe laboratory practices. -Exhibit proper use and handling of compound microscope to observe life on the cellular level. -Convert within the metric system. 	
Language of Instruction:		Instructional Resources/Textbook Correlations:	
<p>Observation, data, inference, prediction, hypothesis, theory, law, controlled experiment, control, manipulated variable, responding variable, conclusion, pie- line- bar- graphs, metric system, compound microscope, electron microscope, cell culture, cell fractionation, biology, spontaneous generation, homeostasis, metabolism, cell, stimulus, asexual and sexual reproduction, evolution,</p>		<p>Prentice-Hall Biology: Chapter 1, Sections 1-4</p> <p>Laboratory Investigations:</p> <p><i>Equipment Survey Activity</i></p> <p><i>Observation vs. Inference Lab – Green Goo</i></p> <p><i>Metric Measurement Lab</i></p> <p><i>Graphing Lab</i></p> <p><i>Scientific Method Lab – Design an experiment</i></p> <p><i>Microscope Lab</i></p>	

	<p>Weblinks/Other Resources:</p> <p>TAKS Workbook</p>
<p>Evaluation/External Assessment/Local Assessment:</p>	<p>Best Instruction Timeline:</p>
<p>Safety Quiz Metric Worksheets Scientific Method Worksheets Chapter 1 Reading Quiz Laboratory reports and performance in lab Chapter 1 Test Microscope Test</p>	<p>1 day - Safety and lab procedures 1 day - Observation and Inferences 2 days - Scientific Method 2 day - Graphing 2 day - Metric System 2 days – Microscopes 2 days - Assessment</p>