

## Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Biology Science of Biology	9 - 12	1 <sup>st</sup> Six Weeks	12 days
TEKS/Student Expectations		Examples/Specifications:	
1A Students will demonstrate safe practices during field and laboratory investigation 1B Students will make wise choices in the use and conservation of resources and the disposal or recycling of materials. 2A Students will plan and implement investigative procedures 2B Students will collect data and make measurements with precision; 2C Students will organize, analyze, evaluate, make inferences, and predict trends from data; 2D Students will communicate valid conclusions. 3A Students will analyze, review, and critique scientific explanations, as to their strengths and weaknesses using scientific evidence and information; 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. 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.		Students will: 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:	
Observation Data Inference Prediction Hypothesis Theory Law Controlled experiment Control Manipulated (Independent) variable Responding (Dependent) variable		Textbook - Chapter 1, Sections 1-4  Lab – Equipment Survey Activity Lab – Metric Measurement Lab Lab – Graphing Lab Lab - Microscope	

<p>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><b>Weblinks/Other Resources:</b></p> <p>TAKS Workbook</p>
<p><b>Evaluation/External Assessment/Local Assessment:</b></p>	<p><b>Best Instruction Timeline:</b></p>
<p>Chapter Worksheet  TAKS Bell Ringers  Safety Quiz  Metric Worksheets  Scientific Method Worksheets  Observation vs. Inference Worksheet  Laboratory reports  Microscope Test  Daily Work  Homework  Teacher – designed 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>