

## UNIT OF STUDY

Title: Unit 4 weeks	Subject/Course: SC Math	Length: 2
Topic: Non-Linear Functions	Grade: 9-12	Designer: D. Rye
<b>UNIT GOALS AND EXPECTATIONS</b>		
<p><b>IMPORTANT CONCEPTS/UNDERSTANDINGS</b></p> <ul style="list-style-type: none"> <li>Solve equations and apply them to answer real-life questions.</li> <li>Define a Function.</li> <li>Apply model to help solve non-linear equations.</li> <li>Solve equations and graph the answers.</li> </ul>	<p><b>ESSENTIAL QUESTIONS:</b></p> <ul style="list-style-type: none"> <li>What is a function?</li> <li>What models can be used to solve real-life problems?</li> <li>What properties are used to solve non-linear functions?</li> </ul>	
<p><b>STUDENT LEARNING EXPECTATIONS:</b></p> <p>NLF.4.AI.2 Determine minimum, maximum, vertex, and zeros, given the graph.</p>		
<p><b>SPECIFIC DECLARATIVE KNOWLEDGE – What I know</b></p> <ul style="list-style-type: none"> <li>Vocabulary words: absolute value, algebraic model, graph of a linear inequality.</li> <li>Identify operation symbols</li> <li>Identify the algebraic model used to solve a problem.</li> </ul>	<p><b>SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do</b></p> <ul style="list-style-type: none"> <li>Apply non-linear functions to real- world problems</li> <li>Use a calculator to evaluate expressions</li> </ul>	
<b>UNIT ASSESSMENTS</b> (Include tasks related to Dimensions 3 and 4 and Bloom's Taxonomy)		

Unit 4 Open Response (application)	
Traditional Assessments: <ul style="list-style-type: none"> <li>• Unit 4 Test</li> <li>• Unit 4 Quiz</li> </ul>	Other Evidence of Learning: <ul style="list-style-type: none"> <li>• Classroom</li> <li>• Teacher Observation</li> </ul>

ACTIVITIES AND LEARNING EXPERIENCES	Resources
<ul style="list-style-type: none"> <li>• 4 Step Vocabulary</li> <li>• Model non-linear functions on board.</li> <li>• Games <a href="http://www.mathplaygroud.com">www.mathplaygroud.com</a> .</li> <li>• Guided practice.</li> <li>• Student lead board work.</li> </ul>	<ul style="list-style-type: none"> <li>• Calculator</li> <li>• Activity worksheets</li> <li>• Portfolio workbook</li> </ul>
Career Connections	
Business Owner, Data Collector, Statistician	