### UNIT OF STUDY

Title: Unit 10 Subject/Course: Sc Math

Length: 2 weeks

Topic: Coordinate Geometry and Transformations Grade: 9-12

Designer: D. Rye

## UNIT GOALS AND EXPECTATIONS

### IMPORTANT CONCEPTS/UNDERSTANDINGS

- Identify a function.
- Graph ordered pairs.
- Apply concepts and skills to use information in tables and bar graphs.
- Find ordered pairs from tables and equations.
- Use a function shown as a table or equation to solve problems.
- How to evaluate an algebraic function for specified values.
- How to graph a function given a table of values or by creating a table of values.

#### **ESSENTIAL OUESTIONS:**

- What are ordered pairs?
- What is a function?
- What is coordinate plane?
- How can a function represent a real world situation?
- How can a graph represent a real world situation?

#### STUDENT LEARNING EXPECTATIONS:

CGT.5.G.5 Draw and interpret the results of transformations and successive transformations on figures in the coordinate plane.

# SPECIFIC DECLARATIVE KNOWLEDGE – What I know

- Vocabulary words: coordinate plane, coordinate axes, origin, ordered pairs, function, bar graph, function notation.
- Identify a function.
- Define a coordinate plane.
- Identify polygons formed by the points.

# SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do

- Apply concepts and skills to use information in tables and bar graphs.
- Use grid to locate points in a quadrant from a problem.
- Write coordinates of points as an ordered pair.
- Write the names of polygons formed by points.

UNIT ASSESSMENTS		
(Include tasks related to Dimensions 3 and 4 and Bloom's Taxonomy)		
Unit 10 Open Response (application)		
Traditional Assessments:	Other Evidence of Learning:	
<ul> <li>Unit 10 Test</li> </ul>	<ul> <li>Classroom</li> </ul>	
Unit 10 Quiz	Teacher Observation	

ACTIVITIES AND LEARNING EXPERIENCES	Resources	
<ul> <li>Model coordinate graphing on board.</li> <li>Games www.mathplaygroud.com.</li> <li>Guided practice.</li> <li>Student lead board work.</li> </ul>	<ul> <li>Calculator</li> <li>Activity         worksheets</li> <li>Portfolio         workbook</li> </ul>	
Career Connections		
Chef, Engineering		