Instructional Unit Title: Go Figure!

The teacher may provide points from all four quadrants and grid paper with coordinate planes so that students can relate the coordinates of a point to the movement of left, right, up and down.

The teacher may explain the concept of absolute value as the distance between two points on a number line so that students can connect this idea to the coordinate plane and can graph the coordinates of a rectangle and find the side lengths and area of the rectangle.

The teacher may provide cardstock rectangles, straight edge, scissors, and tape so that students can explore the area of parallelograms in relation to a rectangle.

The teacher may provide identical pairs of cardstock triangles created on grid paper so that students can explore the area of triangles in relation to a parallelogram.

The teacher may provide templates of squares and equilateral triangles with congruent side lengths (1 unit) and models of rectangular prism (cube), triangular prism, triangular pyramid, and rectangular pyramid so that students can begin to experiment forming nets that create three dimensional figures and find the surface area of each net.

The teacher may provide the dimensions of several different sized rectangular prisms (including whole numbers and positive rational numbers) so that students can begin to connect the concept of volume with the concept of area in relation to fractional dimensions.

PERFORMANCE ASSESSMENT: You work for a candy company that has just developed a new type of candy. The candy is 1 cm deep and 2 cm across. The owner of the company asked several candy box makers to create packaging for the new candy. The candy box makers were provided the following specifications:

- design a box that could hold 18 pieces of candy (i.e., net)
- minimize the packaging material (i.e., surface area)
- create an appealing design

Several companies have submitted designs. You need to write an evaluation of each design based on the above specifications to help the owner choose the best packaging company.