Explore the Area of Triangles

**Shape and Space**

**Unit 1 Line Master 5a**

1. Use a geoboard to create different rectangles and triangles with the same base and height as the rectangle. Complete the chart.

|  |  |  |  |
| --- | --- | --- | --- |
| **Rectangle Measurements**  **(units)** | **Rectangle Area**  **(square units)** | **Triangle Measurements**  **(units)** | **Triangle Area**  **(square units)** |
| 2 by 1 | 2 | 2 by 1 | 1 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

How does the area of a triangle relate to the area of a rectangle with the same base and height?

2. a) Cut out the triangles for each rectangle and explore the   
 relationship you discovered in question 1 between the area of

rectangles and triangles. Does it work for all triangles? In some examples you may need to cut the triangle at the vertex perpendicular to the base.

**Rectangle 1**

**Rectangle 2**

**Rectangle 3**

Explore the Area of Triangles (cont’d)

**Shape and Space**

**Unit 1 Line Master 5b**

**Triangles 2**

**Triangles 1**

**Triangles 3**

b) Make your own rectangle and triangles pair on grid paper.   
Trade with a partner.