**Shape and Space**

**Unit 1 Line Master 6a**

Explore the Area of Parallelograms

1. Use a geoboard to create different size rectangles and parallelograms with the same base and height.

* Create a parallelogram on the geoboard.
* Using a different colour elastic, create a rectangle with the same base and height on top of the parallelogram.
* Using a third colour of elastic, add the leftover triangular piece to the opposite end of the rectangle.

Complete the following chart.

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

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

Explore the Area of Parallelograms

(cont’d)

**Shape and Space**

**Unit 1 Line Master 6b**

2. a) Draw a parallelogram on grid paper. Have your partner cut out   
 the parallelogram and create a rectangle with the same area   
 and measurements. Repeat two more times.

b) Draw a rectangle on a grid paper. Have your partner draw   
a parallelogram with the same measurements. They then cut   
out their parallelogram and demonstrate that the areas are the same. Repeat two more times.