# Unit **13**

# **Family Letter**



Dear Family,

In this unit, Geometry, your child will learn about the coordinate plane and how to plot and interpret points plotted in the coordinate plane, and how to classify triangles and quadrilaterals.

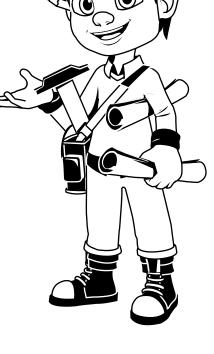
#### **STEM Career Kid for this Unit**

### Hi, I'm Sam.

I want to be an architectural drafter. I will use math in my job when I design windows and doors. I will show students how I will classify shapes in my work.



Term	Student Understanding	
isosceles	describes a triangle that has at least two sides the same length	
parallelogram	a quadrilateral that has two pairs of parallel sides and two pairs of sides that have the same length	
coordinate plane	a plane that is formed when two number lines intersect	
y-axis	the vertical axis (‡) in a coordinate plane	





# What can your child do at home?

Help your child create a chart or flash cards that organize the information in this unit. Include triangles and quadrilaterals. Have your child include all the important information for each shape. It may be also be beneficial to include a picture of each figure.

# **What Will Students Learn in This Unit?**

### **Understanding the Coordinate Plane**

Your child will learn about the parts of a coordinate plane and how to determine ordered pairs and plot them on a coordinate plane. The *x*-axis is horizontal, the *y*-axis is vertical, and the axes meet at the origin. In the ordered pair (*x*, *y*), the *x*-coordinate is the first number and tells how far to move along the *x*-axis from the origin and the *y*-coordinate is the second number and tells how far to move along the *y*-axis from the origin.

#### Example:

Plot the point for each ordered pair.

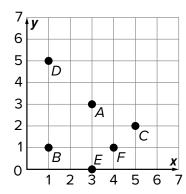
Label each with the letter given.

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Λ.	ハ	2
$\boldsymbol{H}$	LD.	. つ

B (1, 1)

D (1, 5)

F (4, 1)

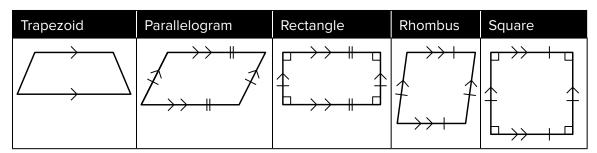


### **Classifying Triangles**

Your child will classify triangles based on their side lengths. Equilateral triangles have all three sides the same length, isosceles triangles have at least two sides the same length, and scalene triangles have all three sides different lengths.

## **Classifying Quadrilaterals**

Your child will classify quadrilaterals based on their properties. The chart below can be used to help identify quadrilaterals.



A trapezoid is a quadrilateral with exactly one pair of parallel sides.

A parallelogram is a quadrilateral with two pairs of parallel sides and two pairs of sides that are the same length.

A rectangle is a parallelogram with four right angles.

A rhombus is a parallelogram with four sides of equal length.

A square is a parallelogram with four sides of equal length and four right angles.