

## Spotlight On: Teams

The CPM curriculum is guided by the philosophy that students need to be active participants in developing their own mathematical understanding. The team structure creates a setting in which students are continuously in the presence of others with whom they can share ideas and articulate their thinking. In teams, students can take risks, where it may be easier than in a large class setting. Students communicate with teammates who may see things differently, giving them opportunities to gain new perspectives, discover new connections between ideas, and practice justifying their reasoning.

## The Big Picture

### Growing From

Fraction operations;  
Representing and interpreting line plots;  
Writing numerical expressions

### Working On

Number operations;  
Analyzing data;  
Writing expressions

### Growing To

Comparing positive and negative numbers;  
Absolute value;  
Measures of center and spread;  
Evaluating expressions

## Need Help?

Methods & Meanings boxes are included in the Mathematician's Notebook as reference.

- 1.2.1: Data Displays
- 1.2.2: Perimeter and Area
- 1.2.3: Rectangles and Square Units
- 1.3.1: Base and Height of a Rectangle
- 1.3.4: Adding and Subtracting Multi-Digit Decimals

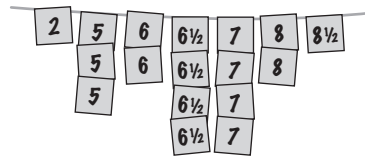
## Current Topics

This chapter sets the stage for the exciting mathematical journey ahead. Students begin their study with an exploration of representations of data. Each of these representations will be revisited throughout the remainder of this course, with increasing levels of depth.

Much of the mathematics students will learn this year requires students to model a quantity and its relationship to other quantities. Rather than jumping straight to an algorithm, the focus at this stage is on developing more concrete models of the mathematical concepts. By doing so, students can deepen their understanding as they build their skill and fluency in mathematics.

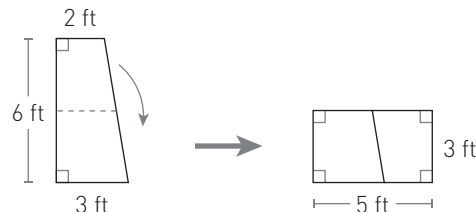
### Numbers and Data (Section 1.1)

A clothesline is used to introduce students to the mathematical representation of a number line. This gives students a memorable experience to ground their work in the number line model for the rest of the course and beyond. Repeated values on a clothesline are a precursor for histograms, which students also create in this section.



### Shapes and Area (Section 1.2)

Students apply prior knowledge to determine the area of composite figures by rearranging them into more familiar rectangles. Formulas to calculate the area of triangles and non-rectangular quadrilaterals will be developed in future chapters.



### Expressions (Section 1.3)

This section moves away from the concrete representations of number lines and rectangles to a more abstract representation of numeric expressions. This section lays the groundwork for the development of variable expressions and equations, which will be formally introduced in Chapters 8 and 9.

## Try This at Home!

Students will see many data displays this year, and discuss what they do and do not reveal. Share a graph (such as a histogram or bar graph) from a news article or other source, and talk with your student about how the graph tells a story.

