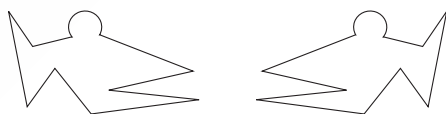


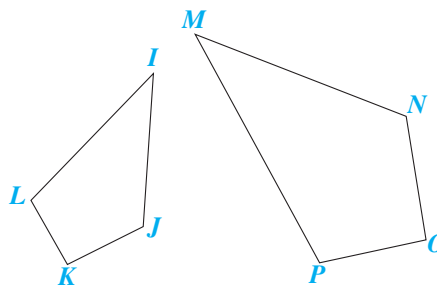
Family Letter

Dear Student and Family Members,

Our next chapter is about similarity between figures or shapes. Similar figures have the same shape, but not necessarily the same size. Congruent figures are figures that have the same shape *and* the same size. We will explore similar geometric figures in two-dimensional and three-dimensional models, and learn about scale and scale factors between similar figures.



Congruent Figures



Similar Figures

We will also investigate the relationships between the scale factor, area, and perimeter of similar figures. We will learn how to dilate two-dimensional drawings as well as three-dimensional objects. For instance, model trains are scale model of real trains and a globe is a scale model of Earth.

At the end of the chapter, we will apply what we've learned to solve an interesting problem: Could the bones of giants 12 times as large as we are really support their weight? Make a prediction and compare it to the answer at the end of the chapter.

Vocabulary Along the way, we'll be learning about these new terms:

congruent	counterexample	ratio
corresponding angles	dilation	scale factor
corresponding sides	equivalent ratios	similar

What can you do at home?

As you look around, you are likely to see many examples of similar shapes: scale drawings, reduced or enlarged photocopies, maps and the actual areas they show, and different-sized boxes of the same kind of cereal or other items. It might be fun for you and your student to point out what you think are similar shapes, and then measure each to verify that they actually are similar.

