

Number and  
Operations  
Ages 3-5

**Goals:**

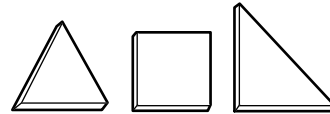
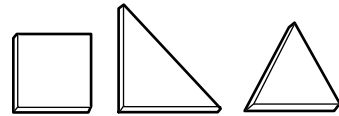
- Develop number sense for whole numbers through 30
- Share equally between two people; explain
- Solve problems and share solutions to problems in small groups

## Get in Line

*Objective: Use ordinal numbers, first and last*

To explore the concept of first, next, and last, divide the children into groups of three. Using the small squares, equilateral triangles and right triangles, distribute one Magna-Tile<sup>®</sup> to each child. Explore lining up according to the shape each child is holding. For example, share the chant below:

First the squares start the line,  
Next right triangles stand behind.  
Last equilateral triangles join in.  
Let's rearrange and start again!



First equilateral triangles start the line,  
Next the squares stand behind.  
Last the right triangles join in.  
Let's rearrange and start again!

**Challenge the children to think of other ways to use the tiles in a first, next, and last arrangement.**

## Build a Shape!

*Objective: Recognize equivalence in sets and numbers*

To explore the concept of fractions, discover how smaller shapes can be used to create a larger one.

Use small squares to cover one of the larger squares. How many small squares does it take to make a large square? How can you make half the large square blue? How can you make half the large square green?

Use right triangles to cover one of the small squares. How many right triangles does it take to make a small square? How can you make half the small square purple? How can you make half the small square red?

**Challenge the children to explore other tiles and how they can be used to make halves and wholes.** Talk about some real-life examples to further explore the concept of fractions. For example, cutting an apple in halves and quarters, cutting a sandwich in halves and quarters (explore the difference between using straight lines and diagonal lines), and cutting a pizza into thirds.