

Math is Fun!

Patterns are everywhere. We see patterns in nature, our daily routines, music, etc. Recognizing, extending, and creating patterns is stressed in Pre-Kindergarten because it is a skill needed for ongoing math success. Addition, subtraction, multiplication, and division become simple operations when patterns are recognized. Children who don't see patterns become frustrated in math. Every computation is a brand new problem. By focusing on patterns in Pre-K, your child will gain confidence and flexible thinking skills.

A repeating pattern is only a pattern if it is repeated at least twice. Your child will first recognize and extend patterns using only two colors or variables, such as tall, short, tall, short, etc. Eventually all children will be given the opportunity to use three colors or variables in their creation of patterns.

At the beginning of this chapter, your child will study patterns in movement. Of the Dimensions Math characters, Sofia and Emma like gymnastics and Mei and Alex like to dance. If your child is involved in one of these activities, be sure to ask him or her to show you a movement pattern.

After movement patterns, your child will look at patterns in sound. Research regarding music shows that there is a link between music and math from a very early age. One study showed that preschool children who studied piano once a week greatly outscored other children on spatial-temporal reasoning skills.¹

Your child will add the colors black and white to those already studied, and will use those colors, among others, to create patterns of linking cubes and beads. Coloring patterns created will help your child gain a deeper understanding of patterning.

Creativity is greatly encouraged in Pre-Kindergarten. Your child will be given many opportunities to create patterns and to have others extend those patterns.

¹Burack, Jodi. "Uniting Mind and Music." *American Music Teacher*, vol. 55, issue 1, 2005, p. 84.

What can we do at home?

- Recognize and point out patterns wherever you see or hear them. Look at clothes, tiles on the floor, wallpaper and other décor. Take your child to a garden and ask him or her to find a pattern in the flowers or other plants growing.
- Look at works of art, including jewelry, and point out patterns. Ask your child what color, shape, etc. comes next in the pattern.
- Create patterns as you move, and have your child name the pattern, for example, small step, big step, small step, big step, and move in the same pattern. Then have your child create a movement pattern, name it, and move in their pattern.
- Read *Town Mouse*, *Country Mouse* by Jan Brett to your child and discuss all of the repeating patterns in the book.
- If you can, provide music lessons to your child. A keyboard, drum, or even a xylophone would allow you to create sound patterns with your child and have your child create sound patterns as well.

Vocabulary & Mathematical Terms

- Pattern
- Repeating
- Black
- White