

Ways Parents Can Support Maths at Home

1. Understanding Numbers

Numbers are used to describe quantities, to count, and to add, subtract, multiply and divide. Understanding numbers and knowing how to combine them to solve problems helps us in all areas of maths.

- Count everything! Count toys, kitchen utensils and items of clothing as they come out of the dryer. Help your child count by pointing to and moving the objects as you say each number out loud.
- Count forward and backwards from different starting places. Use household items to practise adding, subtracting, multiplying and dividing.
- Sing counting songs and read counting books. Counting books also capture children's imagination, by using pictures of interesting things to count and to add.
- Discover the many ways in which numbers are used inside and outside your home. Take your child on a "number hunt" in your home or neighbourhood.
- Ask your child to help you solve everyday number problems. "We need six tomatoes to make our sauce for dinner and we have only two. How many more do we need to buy?"

2. Understanding Measurements

We use measurements to determine the height, length, and width of objects as well as the area they cover, the volume they hold, and other characteristics. We measure time and money. Developing the ability to estimate and to measure accurately takes time and practise.

- Measure items found around the house. Have your child find objects that are longer or shorter than a shoe or a string or a ruler. Together, use a shoe to measure the length of a floor mat.
- Fill different containers with sand in a sandbox or with water in the bath, and see which containers hold more and which hold less.
- Estimate everything! Estimate the number of steps from your front door to the street, then walk with your child to find out how many there really are, counting steps as you go.
- Compare and organise household items. Take cereal boxes or cans of vegetables from the cupboard and have your child line them up from tallest to shortest.

- Include your child in activities that involve measurements. Have your child measure the ingredients in a recipe, or the length of a bookshelf you plan to build.

3. Understanding Shape

The ability to identify and describe shapes, sizes, positions, directions and movement is important in many work situations, such as construction and design as well as in creating and understanding art. Becoming familiar with shapes and spatial relationships in their environment will help children grasp the principles of geometry.

- Identify shapes and sizes. When playing with your child, identify things by their shape and size: "Pass me a sugar cube." "Take the largest cereal box out of the cupboard."
- Build structures using blocks or old boxes. Ask your child which shapes stack easily and why.
- Hide a toy and use directional language to help your child find it. Give clues using words or phrases such as up, down, over, under, between, through and on top of.
- Play "I spy", looking for different shapes. "I spy something that is round." "I spy something that is rectangular." "I spy something that looks like a cone."
- Ask your child to draw a picture of your street. Talk about where your home is in relation to a neighbour's home. Use directional words and phrases like beside and to the right of.
- Go on a "shape hunt". Have your child look for as many circles, squares, triangles and rectangles as he or she can find in the home or outside. Do the same with three-dimensional objects like cubes, cones, spheres and cylinders.

4. Understanding Patterns

We find patterns in nature, art, music, and literature. We also find them in numbers. Patterns are at the very heart of maths. The ability to recognise patterns helps us to make predictions based on our observations.

- Look for patterns in storybooks and songs. Many children's books and songs repeat lines or passages in predictable ways, allowing children to recognise and predict the patterns.
- Create patterns using your body. Clap and stomp your foot in a particular sequence (clap, clap, stomp), have your child repeat the same sequence then create variations of the pattern together.

- Hunt for patterns around your house and your neighbourhood. Your child will find patterns in clothing, in wallpaper, in tiles, on toys, and among trees and flowers in the park. Encourage your child to describe the patterns found.
- Use household items to create and extend patterns. Lay down a row of spoons pointing in different directions in a particular pattern (up, up, down, up, up, down) and ask your child to extend the pattern.