

Ideas to help your child with maths

1. Understanding Numbers

- **Count everything!** Count toys, kitchen utensils, and items of clothing as they come out of the dryer. Count as you go up the stairs. Help your child count by pointing to and moving the objects as you say each number out loud. Count forwards and backwards from different starting places. Use household items to practise adding, subtracting, multiplying, and dividing.
- **Sing counting songs and read counting books.** Songs make learning to count – both forwards and backwards – fun for children. 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. Point out how numbers are used on the television set, the microwave, and the telephone. Spot numbers in books and newspapers. Look for numbers on signs as you walk to the shops. Encourage your child to tell you whenever he or she discovers a new way in which numbers are used.
- **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?" "You have two pillows in your room and your sister has two pillows in her room. How many pillowcases do I need to wash?" "Two guests are coming to eat dinner with us. How many plates will we need?"
- **Make up games using dice and playing cards.** Try rolling dice and counting out that number of objects. Play games like snakes and ladders, Ludo. Use two dice and add the numbers together.

2. Understanding Measures

- **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. Use kitchen scales to weigh objects and talk about which ones are heavier or lighter.
- **Estimate everything!** Estimate the number of steps from your front door to the edge of your garden, then walk with your child to find out how many there really are, counting steps as you go. Estimate how cartons of milk your family will need for the week. At the end of the week, count up the number of cartons you actually used. Ask your child to count the number of circles he or she can draw in a minute. Ask if the total is more or less than your child thought it would be.
- **Compare and organize household items.** Take cereal boxes or cans of vegetables from the cupboard and have your child line them up from tallest to shortest. Compare the size/weight/length/height or capacity of different objects and put them in order from smallest/lightest/shortest etc.
- **Talk about time.** Look at numbers on the clock. Ask your child to check the time on the clock when he or she goes to school, eats meals, and goes to bed. Use words such as *yesterday*, *tomorrow*, *last week*, *next week*, *next*, *before*. Draw pictures of and sequence things that you do every day, eg waking up, breakfast, brushing teeth, etc
- **Include your child in activities that involve measurements.** Let your child help to measure the ingredients in a recipe, or the length of a bookshelf you plan to build. Play shopping games with real pennies using packets or tins of food.

3. Understanding Shape

- **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.** Discuss the need to build a strong base. 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 and 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, neighbourhood, or town.** Talk about where your home is in relation to a neighbour's home or the corner store. 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. Point out that street signs come in different shapes and that a pop can is like a cylinder.

4. Understanding Patterns

- **Look for patterns in storybooks and songs.** Many children's books and songs repeat lines or passages in predictable ways, allowing children to recognize and predict the patterns.
- **Create patterns using your body.** Clap and stomp your foot in a particular sequence (clap, clap, stomp), encourage your child to repeat the same sequence, then create variations of the pattern together. Teach your child simple dances that include repeated steps and movements.
- **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. Try to identify the features of the pattern that are repeated.
- **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.
- **Explore patterns created by numbers.** Write down numbers 1-20 or 1-30 and look for the patterns created