Supporting numeracy at home

Numeracy is about being able to understand and use numbers in a range of situations, for example when solving problems or making decisions in situations involving numbers.

How can I help?

Learning doesn't just take place in the classroom, it can happen anywhere.

A child or young person's everyday routine offers many opportunities and experiences to practise and apply their numeracy skills in real and meaningful ways.

There are many ways that you can build learning activities into everyday routines to support your child's numeracy skills.

Below are some simple ideas to build numeracy skills into everyday activities from early years to secondary.

Early Years

- Look out for all numbers you see around the house.
- Count how many steps there are from the gate to the front door or around the garden and talk about the differences in the size of your steps.
- As you tidy up, encourage your child to arrange toys and books in order of size.
- Count how many things are in the fridge or the cupboard.
- Count how many star jumps or hops you and others in your household can do.
- Investigate different coins and talk about their value.
- Play board games which need the use of dice e.g. ludo or snakes and ladders.
- Point out the time on the clock, particularly at breakfast, dinner or bedtime.

Key Stage 1 and 2

- Estimate and take their own, your and other family members measurements height, weight, shoe size.
- Play games which involve calculating scores e.g board games or online games.
- Calculate the cost of a home delivery or take away.
- Explain how to work out the value of the graduations on the scales on measuring equipment.
- When baking, encourage your child to explain how they would work out quantities to make the recipe for more or less people. e.g for making 18 cupcakes from a recipe for 6.
- Allow your child to be in charge of setting the timer while you cook together, this will develop skills in estimating time and provide opportunities for calculating time durations.

Many children can struggle to process and understand information which can include a difficulty with conceptualizing and performing mathematics. The following are several practical ways that adults (or siblings!) can help a child who struggles with maths.

1. Play With Dominoes

Playing games that use dominoes can help a child more easily understand simple math concepts. Children should learn to recognize the number patterns on the dominoes and dice instead of counting the individual dots each time. Start by using dominoes and dice by themselves so your child feels comfortable with these objects. Next, find a game your child enjoys that uses these items.

2. Resist Always Using Worksheets

Whenever possible, parents should play games with their children to reinforce math facts instead of relying on worksheets. Games are almost always more interesting for kids. They present maths as fun challenges to solve instead of boring concepts to memorize. If worksheets are used, it may be necessary to highlight important numbers in the instructions and throughout various problems. Allow your child to use a variety of coloured pencils when completing worksheets, as it may help them more easily organize their work.

3. Use Manipulatives

Seeing and handling a tangible object will help a child better understand the abstract principles of maths. Legos and simple blocks can be used to teach addition and subtraction. Covering a certain number of counters with your hands will enable your child to more easily visualize different groups of numbers.

4. Learn the Language of Maths

Parents should encourage their child to talk out loud as they work through a problem or new math concept. Children who struggle with maths may have good language skills that could help make the mathematical process easier. It's a good idea for children to learn different words to describe the same operation. For example, when discussing addition problems they could use terms such as "plus," "increase" and "more than." Explain basic terms to your child and allow them to talk about each definition, describing what it means in their own words. Older children may enjoy making their own maths dictionary.

5. Create Visual Models

Drawing to vividly explain aspects of maths problems can be very helpful. Jottings, diagrams and drawings can all make an abstract problem more real. Even simple household objects such as different coloured socks or pairs of shoes can be used to teach addition, subtraction, multiplication or division.