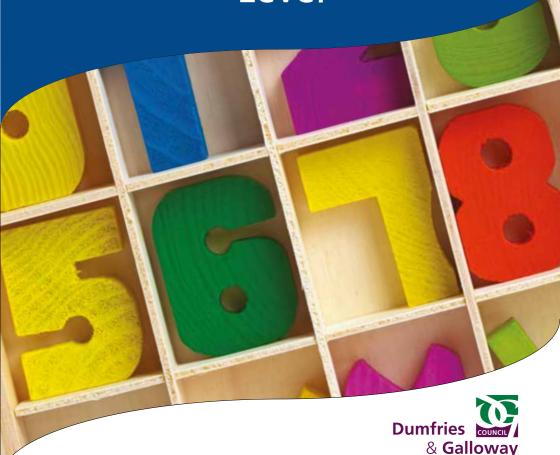


# **Numeracy**

Early / First and Second
Level



### Introduction

There is a focus on developing **Mental Maths** skills during Early Level. You can do this by involving your child when using maths skills in our everyday lives. If you talk about the calculations and maths lan-guage as you do things e.g when shopping, cooking, filling a bath with water, driving, out walking etc.

you will be helping your child enormously ...you probably already do this without even realising it!

Don't shy away from maths if you didn't like it at school, try to find new ways to enjoy the subject with your child and make it as much fun as possible - games, puzzles and jigsaws are a great way to start, but also try to find examples in everyday life.

## Tips for helping your child enjoy and use maths in real life...

- Counting amounts of things you buy and using small change when shopping;
- Reading prices on things / shelf ends and finding BIG numbers!
- Looking for pence and pound signs;
- Talking about the weight of food / fruit and veg. Is it heavy? Light?
   Which weighs most or least?
- Talking about how much milk is in their cup is it full? Half full? Empty?
- Measuring ingredients and quantities when baking, e.g. 2 cups of flour;

- Talk about which direction you take when you walk/ drive to school –
   Left? Right? Forward then first right?
- Naming shapes and reading numbers around your home and outside;
- Estimating how many steps do you think it will take to walk to the next lamp post?
- Measuring your child's height over time and how much they have grown!
- Pairing socks and sorting out the washing / clothes into colours and sizes.

And if you can, also use ICT - There are several websites such as the BBC with excellent number games on them.

#### Above all - make maths relevant and fun!



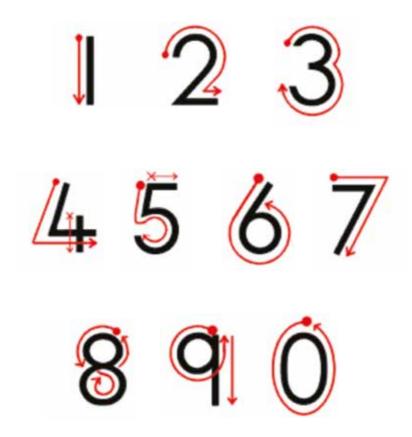
## Number Formation Guide

Encourage your child to form numbers in the standard way. Bad habits are difficult to break,

so following our simple guide can help to prevent problems at a later stage.

**Spots** indicate the starting position of the pencil. The pencil should remain on the paper, following the arrows. For the numbers four and five, the pencil must be raised before completing the second part of each number.

**Crosses** indicate the second starting positions.





Outlined in the tip sheet we have highlighted strategies to support your child with numeracy and to challenge their learning further.

Please find below a selection of websites that will help. This is not an exhaustive list.

Education Scotland have produced guidance and activities to support parents in developing numeracy skills.

## www.educationscotland.gov.uk

www.ictgames.com www.woodlands-junior.kent.sch.uk/maths/ www.bbc.co.uk/bitesize/firstlevel/mathematics/ www.maths-games.org www.mad4maths.com/parents http://www.bbc.co.uk/bitesize/secondlevel/ www.multiplication.com www.crickweb.co.uk www.topmarks.co.uk

## Introduction

Your child's learning in maths will enable them to gain knowledge and understanding of a range of concepts and be able to use these in different classroom and real life situations. Through class teaching and with your support we will provide your child with essential numeracy skills which they will use throughout their lives.

You can support your child's learning through the use of board games, songs and rhymes, stories, mental maths and interactive games etc.

Use your local environment and look for opportunities to explore numeracy e.g. when handling money, discussing time, looking for shapes, counting and looking for number patterns or talking about big numbers.

The aim of this leaflet is to give you some practical ideas for numeracy activities that you can enjoy with your child.

#### **NUMBERS**

- Practise ordering numbers. Use different starting points.
- Challenge your child to fill in the missing number on a number line.
- Talk about numbers before, after and in-between.
- Talk about how many digits a number has e.g. 345 has 3 digits.
- Talk about hundreds, thousands, tens of thousands, hundreds of thousands and millions.
- Ask your child to identify what the number value is eg the value of 5 in 75000 is 5000.
- Give your child a variety of numbers and ask them to make the biggest/ smallest number.
- Talk about odd and even numbers. Write them out and colour code them.
- Half and double numbers.
- Practise reading and writing the names of numbers as high as they want to go!



#### COUNTING

- Mix it up and use different numbers as your starting point.
- Count in steps of different sizes e.g. counting in 2s, 5s, 10s etc.
- Count forwards and backwards.
- Link counting to your surroundings and exploit opportunities to count e.g. lampposts on a walk, green cars on a journey etc.

#### **MULTIPLICATION & DIVISION**

- Explore number patterns by investigating multiplication tables from 2 to 12.
- Explore sharing and division through sweets, fruit & toys. Relate this to the times tables facts

#### ADDING AND TAKING AWAY

- Talk about adding and taking away in everyday situations e.g. when at the shops, measuring ingredients in cooking etc.
- Practise adding/subtracting
- Ask your child to hold a big number in their head and add/subtract to or from that number
- Ask your child to take away or add tens, hundreds, thousands, and millions to a given number.
- Add and subtract using numbers on a license plate, house numbers or road signs.
- Challenge your child by using the language of maths.
- Add/find the total/equals Subtract/take away/find the difference.
- Encourage your child to see number sequencing in their head.
- Make a number line and use it to count on or count back when adding or subtracting.
- When adding big numbers practise splitting the numbers up and adding the thousands, hundreds, tens and units to help your child find the total.
- Ask your child questions about how they worked out the answer. See if they can use what they know to guess the answer before they work it out.



#### **RESOURCES**

There are lots of resources that you can use at home to help support your child's learning.

These are just are few suggestions:

- **Magnetic numbers**
- **Dominoes**
- **Board games**
- **Playing cards**
- Interactive games on the computer

Below are some of the websites that we recommend.

Education Scotland have produced guidance and activities to support parents in developing numeracy skills.

## www.educationscotland.gov.uk

www.ictgames.com www.woodlands-junior.kent.sch.uk/maths/ www.bbc.co.uk/bitesize/firstlevel/mathematics/ www.maths-games.org

## Introduction

Numeracy skills are important to a child's success – both at school and in everyday life. Understanding of numbers and number processes also builds confidence and opens the door to a range of career options.

## How does my child learn numeracy?

Children learn about numbers best through activities that encourage them to:

- explore
- think about what they are exploring
- solve problems using information they have gathered themselves
- explain how they reached their solutions

Children learn easily when they can connect numeracy concepts and procedures to their own experience. By using common household objects (such as measuring cups and spoons in the kitchen) and observing everyday events (such as weather patterns over the course of a week), they can "see" the ideas that are being taught.

An important part of learning numeracy is learning how to solve problems. Children are encouraged to use trial and error to develop their ability to reason and to learn how to go about problem solving. They learn that there may be more than one way to solve a problem and more than one answer. They also learn to express themselves clearly as they explain their solutions.

## What tips can I use to help my child?

### Be positive about numeracy!

- Let your child know that everyone can learn about numbers
- Let your child know that you think numeracy is important and fun
- Point out the ways in which different family members use numbers in their jobs

- Be positive about your own maths abilities. Try to avoid saying "I was never good with numbers" or "I never liked maths"
- Encourage your child to be persistent if a problem seems difficult
- Praise your child when he or she makes an effort, and share in the excitement when he or she solves a problem or understands something for the first time

## Numeracy activities you can do with your child

• 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 around town. 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 in your local area. 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. eg you have a budget and require to buy a number of items from the shop - ask for totals, and then for change. Any oppportunities to problem solve in a real life context - planning a holiday, fitting a new carpet, organsing a birthday party etc If you see a % or a decimal ask your child to describe what this means - can they work out the discount, original price, discounted price?



- Continue to practise "skip counting". using all the timetables from 2 to 10, challenge them with the 11 and 12 timestable. Count up and back.
- Dice games. Roll two dice, one to determine a starting number and the other to determine the counting interval. Ask your child to try counting backwards from 10, 20, 100 or even larger numbers.
- Make up games using dice and playing cards. Try rolling dice and adding or multiplying the numbers that come up. Add up the totals until you reach a target number, like 100. Play the game backwards to practise subtraction.
- Play "Broken Calculator". Pretend that the number 8 key on the calculator is broken. Without it, how can you make the number 18 appear on the screen? (Sample answers: 20 2, 15 + 3). Ask other questions using different "broken" keys.
- Practise the times tables. Not the most exciting of activities, but knowledge of times tables are essential in many other concepts, such as division, fractions and decimals..... Try practising them on long car journeys. Try giving 'quick fire' questions while making the dinner, "what's 2 fives?" etc.

## Challenge and fun

To fully prepare your child for 3rd Level we must expose them to more mathematical vocabulary and concepts. We can do this through discussions about:

- Powers & Roots
- Prime Numbers
- **Negative Numbers**
- Proportions in relation to fractions & percentages
- Multiples & Factors

You should make this experience fun and motivating through exposure to different websites, maths challenges & real life experiences.





Outlined in the tip sheet we have highlighted strategies to support your child with numeracy and to challenge their learning further.

Please find below a selection of websites that will help. This is not an exhaustive list. Education Scotland have produced guidance and activities to support parents in developing numeracy skills.

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