



**Aitkenbar Primary School**

**A  
Parent's Guide  
to  
Numeracy**



## Helping your child with Numeracy



### **The importance of parents**

As a parent/carer, you give your child their first experiences of maths; handling money, going shopping, travelling, baking cakes and sorting toys, etc. Even if you don't feel confident with maths, you can still make a huge difference to your child's numeracy confidence and ability.

## **What is numeracy about?**

Being numerate is a life skill that will help your child at home, at school, and one day in their work lives too. At all levels learning numeracy is about mental calculations, solving problems and being creative in finding ways of working things out.

**Golden Rule: Whatever you do, make sure your children enjoy it!**

If they struggle to understand, make mistakes, or get bored: keep calm, make it easier, change the subject, tell them a joke but please don't get cross or impatient – you could put them off maths for life.

**Generally, the advice is;**

- Talk about and involve children in the situations in which you use maths in everyday life such as looking at number in the environment or asking them how much money you will need to pay for an item when shopping.
- Play games involving numbers; card games, dominoes, darts, draughts, chess etc.
- Use opportunities at times of boredom E.g. When travelling in the car.



Early - Primary 1

## **Everyday situations and opportunities for learning:**

- **Sorting** things out, **matching** and putting things away, E.g. shopping, using toys, cutlery, socks, and gloves.
- Talk about which things go together and where things go – Use **directional language**; up, down, over, under, between, through, beside, behind, in front of, and on top of. Make the game more challenging and give two or even three part directions e.g. ‘It’s on top of the table and to the left of the magazine.’
- **Ordering and Sequencing** when getting dressed, going to the shops, having a bath etc. Talk about what you did **first**, what you do **next** and **last of all**.....
- Ask your child to help you organise things at home – **Compare** objects according to **size, weight, height or length** E.g. the longest spoon, the lightest shopping bag, the cup which holds the most, the shortest person, the widest hand, the bottle which is half full.

- **Counting** – songs, read books, play games, and watch films about maths. The Number before and after; E.g. What is the number before 13? Order numbers from the largest to the smallest and vice versa. Count in 1's and 2's as you climb stairs, walk to the local shop, etc.
- You could play 'I spy' but with **numbers** or **shapes**. Look for them...on doors, buses, cars, signs, at home, at the shops, on TV...anywhere. Remember to talk about what the numbers mean.
- Play with blocks like Lego, Jenga, bottle tops, shells, beads, colouring pencils, paint or play dough and compare them. **Create patterns and structures** too. Encourage your child to think about size, colour, shape, weight, texture.
- **Counting, weighing, measuring and timing** when cooking.
- Talking about **Time**, referring to the clock (preferably a clock with hands) at different times throughout the day.

Set times for certain events; E.g. 'We'll have lunch at 1 o'clock, How long will it take to wash the dishes?'

- Handling small amounts of **money** when shopping, counting small totals using coins to 20p. E.g. How many 1p's are needed to make 5p? How much change will I get from 5p, if I spend 2p on a lolly?
- Simple **addition/subtraction** calculations E.g.  $5 + 2 = 7$  is the same as  $2 + 5 = 7$ . Practising and developing knowledge of addition (within 10) and subtraction facts (within 5).

## First Level – Usually P2, 3 and 4

Number Stories to 20 (Initially).



E.g. Story of 11;

**Addition****Subtraction**

$11+0=11$

$11-0=11$

$10+1=11$

$11-1=10$

$9+2=11$

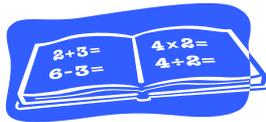
$11-2=9$

$8+3=11$

$11-3=8$

Continue and Identify the patterns!

Then continue practising and developing knowledge of addition and subtraction facts within 100 E.g. Numbers Stories of 21, Same as above process.



**Then working out multiplication and division facts to 10x10**

E.g. The Story of 42



### **Multiplication**

$$6 \times 7 = 42$$

$$7 \times 6 = 42$$

### **Division**

$$42 \div 6 = 7$$

$$42 \div 7 = 6$$

Make it into a game, if possible E.g. Have a set of cards numbered 1-10, pick a number such as 4, say 4 times the number on the card as each is turned over, keep all the cards you get right. Beat the calculator as above.

- **Order** numbers from the largest to the smallest and vice versa. E.g. 85, 82, 18, 11 (up to 100 and then beyond).
- **Counting** in 2's, 5's and 10's then progressing onto counting in 3's and 4's and then including all tables up until the 9 times table. Counting by itself can be boring, so encourage them to count things like steps, jumps, bounces, (good for competitions too!), or clouds in the

sky, trees, crisp packets, lampposts, red cars, ants...anything!

- Working out 2-digit **additions and subtractions**, multiplying and dividing 2-digit numbers by 1 digit numbers mentally. Talk about how to make sums easier,

E.g. for  $28 + 15$ , call it 30 add 13 and that's easy; for  $16 \times 4$ , double 16, then double 32.

- **Open-ended activities** - The answer's 25, what's the question? How can you use combinations of 3 and 6 to make different numbers? (Use each number as many times as you like with addition, subtraction, multiplication or division.)

**'The answer is 10 (or any number), what's the question?'**

Possible responses: 8 plus 2 , 1 million divided by one hundred thousand,  $5 \times 2$ ,  $25 - 15$ , 2.5 times 4, the number before 11, 9999 subtract 9989, the square root of

100. This is a brilliant activity because: there's no failure; it stimulates thinking about and stretching knowledge of numbers and mathematical relationships; it's good fun.

- Money – Discuss and compare prices from catalogues and talking about coinage up to £1 and then £2



**Second Level – Usually P5, 6 and 7**

- Practise **Counting** to higher numbers in tens, hundreds and thousands, and backwards too. Counting by itself can be boring, so encourage them to count things like trees, signs, houses, anything!
- **Addition and Subtraction including hundreds, tens and units mentally** E.g.  $134+25$ . How did you work it out?' Multiplication and Division games to improve speed and accuracy including using a pack of cards and multiplying the numbers together – first to answer.
- Play games with cards – players take 2 cards and **add** the numbers – the player with the highest number wins. You can play this game with **subtraction**, **multiplication** and **division** too. Play 'Think of a number' – you think of a number between 0-1000, and they have to guess. They can **ask questions** like 'is it less than 5'?
- **Order numbers** from the largest to the smallest and vice versa, up to and including 1 million. E.g. 346, 364, 368 and 390

- Ask '**Progressive**' Calculations, e.g.  $7 + 6$ ,  $17 + 6$ ,  $27 + 6$ ,  $47 + 6$ ,  $147 + 6$ ;  $5 \times 2$ ,  $50 \times 2$ ,  $500 \times 2$ ,  $500 \times 20$ .
- Ask your child to help you **measure** out ingredients/set the timer when you are cooking. Get your child involved with measuring and calculating how much curtain fabric is needed, how much wood for shelves, how many wall or floor tiles are needed, how much carpet etc. When you eat food that can be shared, like pizza, crisps, cake, berries etc, and your child to help you share it equally with whoever's eating E.g. Find halves, quarters, fifths, eighths of amounts, etc.
- Talking about **Time and Money** - more advanced questioning. How long does it take to walk to school, the park, etc? Handling amounts of money when shopping, working out total costs, working out change, checking receipts. Working out how much petrol will be used on a journey, working out average speed for a journey, costing journeys or holidays, working out prices of sale items, e.g.

3 for 2, Buy one get one free. Managing pocket money and saving for it. Talk about how long is it until lunch time? The journey takes  $2\frac{1}{2}$  hours, when will we arrive? We need to be there at 2.00 pm, when do we need to leave home? Many children will still need practice with reading clock times, particularly minutes to and minutes past the hour.

- Talk about the **shape and size** of objects – use the internet to find interesting size facts like tallest and shortest people, or biggest and smallest buildings etc
- Working out **Distances and Directions** from maps
- **Estimate** – Play with containers, guess then find out how many socks can fit into a box? Experiment with sand, water, beads, sweets, etc. Ask your child to predict an answer and then do the activity to see if they were right close they were.

- **Data Handling** – Ask your child to collect information and create a tally chart, e.g. Find out the family's favourite animal or fruit etc.

