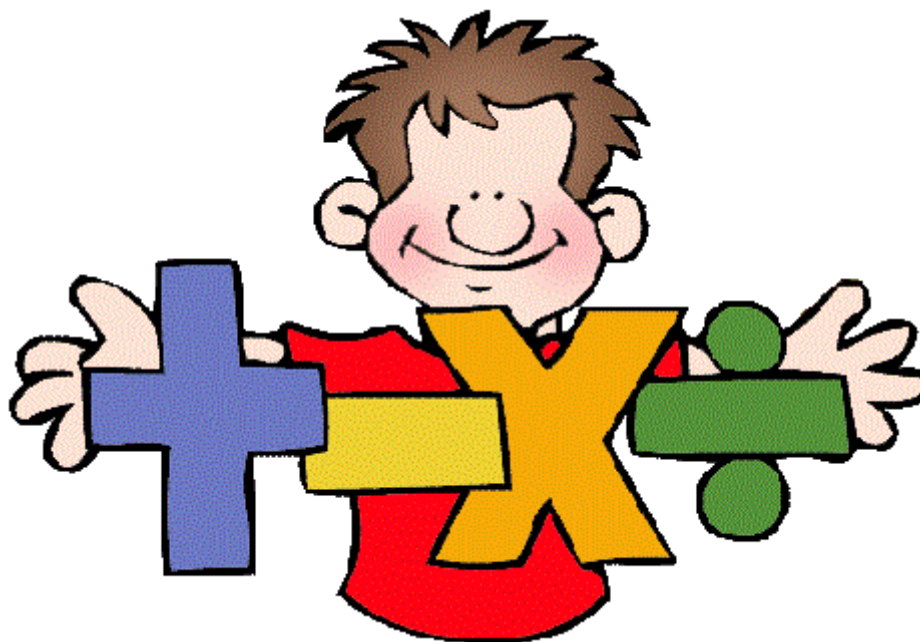# A Parents' Guide to Helping Your Child with Mathematics

## Introduction

This booklet is intended to clarify and explain some of the ways in which your child is taught to complete and write down calculations. You may be surprised to find your child's Mathematics book contains writing, pictures, diagrams, jottings or blank number lines and not many 'formal calculations'. Certainly, many of the methods your child uses may be very different from those that you learned at school and this can cause confusion when you are trying to support your child at home. From the very early years at school the emphasis on mathematics learning is upon children understanding and applying the skills they have learnt rather than just learning by wrote a formal written method.

We have tried as simply as possible to aid you in understanding some of the strategies your children may use to help you to help your children. You will be amazed at how many different ways there are to attempt the same idea!. The booklet contains the approaches your children may use to support their thinking when solving addition, subtraction, multiplication and division calculations. We have also included typical mathematical vocabulary your child may be acquiring and using at this stage.

This is a guide only; children will always progress at different speeds, however support from you will undoubtedly be of great benefit to them at all times. We have tried to make the strategies as clear as possible however if you are unsure of any ideas in the booklet please do not hesitate to ask.

# Addition

**End of Year Objective:**
*Add one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations).*

**Key Vocabulary:** add, addition, more , less, sum, total , altogether, how many more, tens, units, ones, one more, how much more is, digit

Children in year 1 will build upon their experiences in Reception by continuing to complete lots of practical activities that involve counting and combining sets of objects, as well as identifying numbers which are 1 more and 1 less than a given number. Many will make their own pictorial representations to show how they are combining these sets and numbers together and begin using more formal mathematical symbols such as + and = signs.

Using their developing understanding of place value, they will move on to be able to use Base 10 equipment to make teens numbers using separate tens and units.

For example, when adding 11 and 5, they can make the 11 using a ten rod and a unit.

The units can then be combined to aid with seeing the final total, e.g.

so 11 + 5 = 16.

# Subtraction

**End of Year Objective:**
*Subtract one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations).*

**Key Vocabulary: Subtract, minus, left, less, fewer, difference between, less than**

Children will continue to use practical equipment and taking away strategies.

Children will be encouraged to think of subtraction in two ways, finding the difference and taking away. As with addition, children will begin by representing their subtraction calculations pictorially and then begin using symbols such as – and =
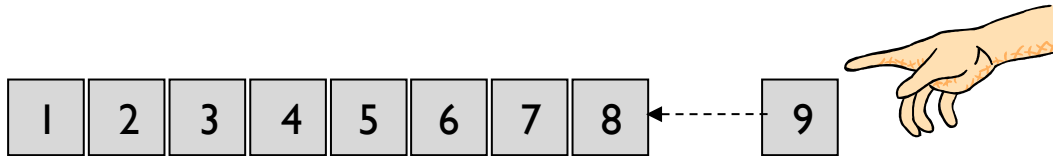
Eg: 7-3=4

Where the number is bigger than 10 e.g. 13 – 4:

Touch count and remove the number to be taken away, in this case 4.

|  |  |  |  |  |  |  |  |  | → | 4 | 3 | 2 | 1 |
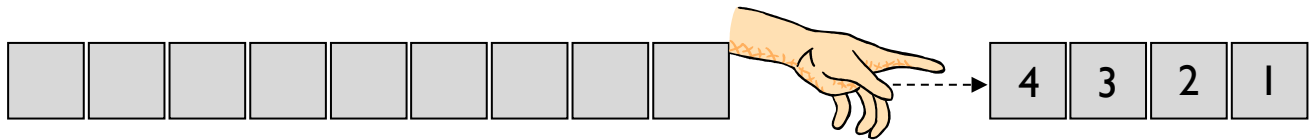
Touch count to find the number that remains.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | ← | 9 |

# Multiplication

**End of Year Objective:**
**Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.**

**Key Vocabulary:**
**times, multiply, lots of, repeated, addition, array, double, groups of**

Children in year one will begin their introduction to multiplication by counting in 2's, 5's and 10's both backwards and forwards. They will be encouraged to use repeated addition and arrays to aid them in their understanding of what multiplication means, as well as counting on in equal steps in order to lead them into learning their multiplication tables. Children will continue to solve multiplication problems using practical equipment and jottings.  They may use the equipment to make groups of objects.

Children should see everyday versions of arrays, e.g. egg boxes, baking trays, ice cube trays, wrapping paper etc. and use this in their learning,  answering questions such as 'How many eggs would we need to fill the egg box?  How do you know?'

# Division

**End of Year Objective:**
**Solve one-step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.**

**Key Vocabulary:**
**share. group, divide, half, array, divided by, share equally**

In year one, children will continue to solve division problems using practical equipment and jottings. They should use the equipment to share objects and separate them into groups, answering questions such as 'If we share these six apples between the three of you, how many will you each have? How do you know?' or 'If six football stickers are shared between two people, how many do they each get?' They may solve both of these types of question by using a 'one for you, one for me' strategy until all of the objects have been given out.
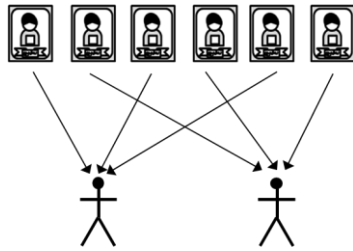


Children will be introduced to the concept of simple remainders in their calculations at this practical stage, being able to identify that the groups are not equal and should refer to the remainder as '… left over'.

## WEBSITES

Here are some web sites you could use with your child to help them with their maths.

www.mathszone.co.uk
www.mathsisfun.com
www.ictgames.com
www.woodlands-junior.kent.sch.uk/maths

## TOP TIPS

Here are some other top tips that may help:

- Talk to your child about maths

- Be positive about Maths!! Let your child know that everyone can learn maths. Be positive about your own maths abilities. Try to avoid saying "I was never good at maths" or "I never liked maths"

- Let your child know that you think maths is important and fun!

- When your child is trying to solve a problem ask what he or she is thinking. If your child seems puzzled, ask him or her to tell you what doesn't make sense. (Talking about their ideas and how they reach solutions helps children learn to reason mathematically)

- Treat errors as opportunities to help your child learn something new. We all learn from mistakes!

- Make maths part of your child's day. Include your child in everyday activities that involve maths – making purchases, measuring ingredients, counting out plates and utensils for dinner.