

# Developing Critical Thinkers and Young Problem Solvers at Acresfield

## Year 2

### Our Approach to Maths

This booklet is designed to give parents an overview of expectations in Year 2 linked to the maths curriculum.

It outlines the following:

- ✓ Curriculum expectations in number for children in Year 2
- ✓ Approaches to learning used by staff at Acresfield
- ✓ Ways you can support your child at home

In Year 2, children should be using their addition and subtraction facts to 10 and 20 to work out facts to 100 e.g  $8+2 = 10$  so  $80+20 = 100$ .  $13+7 = 20$  so  $63+37=100$

- The children also need to be confident with numbers to at least 100. This includes counting, reading, writing and comparing. As they become more confident with numbers up to 100, they can be introduced to larger numbers.

-They will also be introduced to partitioning numbers in different ways e.g.  $23 = 20 + 3$  and  $23 = 10 + 13$ .

-They will explore zero as a place holder. E.g. 104

-They will need to be confident at recalling their 2, 5 and 10 multiplication tables



The children in Year 2 build on their learning from Year 1, where they continue to use concrete objects to support their understanding and begin to develop the use of informal written methods to record their answers.

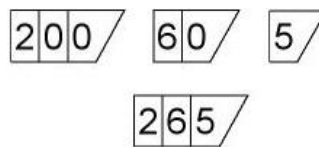
The children continue to be shown different models and images to support them with their calculations.

### General Number and Place Value

[What the national curriculum expects children to be able to do in Year 2]

- ✓ Count in steps of 2, 3, and 5 from 0 and in tens from any number, forward and backward
- ✓ Recognise the place value of each digit in a two digit number [tens, ones]

**How might this look?**

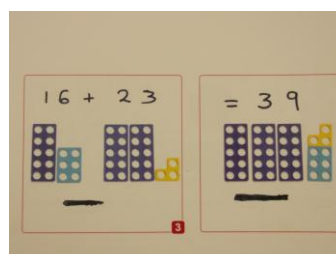


- ✓ Identify, represent and estimate numbers using different representations, including the number line.
- ✓ Compare and order numbers from 0 up to 100; use  $<$ ,  $>$  and  $=$  signs
- ✓ Read and write numbers to at least 100 in numerals and in words
  - ✓ Use place value and number facts to solve problems

### Addition and Subtraction

- ✓ Solve problems with addition and subtraction
- ✓ Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100 e.g.  $8+2=10$   $80+20=100$ 
  - ✓ Add and subtract numbers using concrete objects, pictorial representations and mentally, including a two digit number and ones, a two digit number and tens, two two digit numbers, adding three one digit numbers.

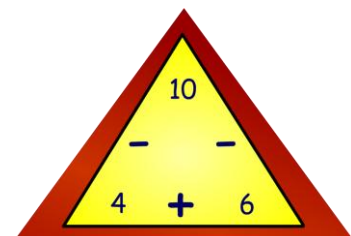
**How might this look?**



- ✓ Show that addition of two numbers can be done in any order and subtraction of one number from another cannot.
- ✓ Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

### How might this look?

$$6+4=10, 4+6 = 10, 10-6 =4 \text{ and } 6= 10-4$$



### Multiplication and Division

- ✓ Children should recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
- ✓ Calculate mathematical statements for multiplication and division within the multiplication tables e.g  $4 \times ? = 20$  or  $? \div 10 = 3$
- ✓ Show that multiplication of two numbers can be done in any order and division of one number by another cannot
- ✓ Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts

How might this look?



$5 \times 2$



$2 \times 5$

### Fractions

- ✓ Recognise, find and name and write fractions  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$  and  $\frac{3}{4}$  of a length, shape, a set of objects or quantity.
- ✓ Write simple fractions for example,  $\frac{1}{2}$  of 6 = 3 and recognise the equivalence of  $\frac{2}{4}$  and  $\frac{1}{2}$
- ✓ Count in fractions up to 10 starting from any given number e.g.  $1\frac{1}{4}$ ,  $\frac{12}{4}$ , [or  $1\frac{1}{2}$ ]  $1\frac{3}{4}$ , 2

e.g. Would you rather have one half of 8 sweets [ $\frac{1}{2}$ ] or two quarters of 8 sweets. [ $\frac{2}{4}$ ]. The children need to explore this type of investigation.



## How Parents Can Help at Home

- ✓ Build maths into everyday life
- ✓ Support the methods used in school
- ✓ Use objects to help your child to see the number
  - ✓ Shape and measures work

In Year 2 the children have select pieces of maths homework during the year, to build on the introduction in Year 1. These are usually informal activities designed to build the children's confidence with maths through practical activities, supported by an adult.

However, during the year, parents can look for ways to reinforce learning in everyday situations. This could be reinforcing multiplication tables for the 2, 5 and 10 tables or counting forwards and backwards in steps of 2, 3 and 5. Money is a useful resource to support children with this.

Parents can also support their child with work linked to **measures**, which is a part of the Year 2 maths curriculum. The children have to choose and use appropriate standard units to estimate and measure length/height in any direction [m/cm]; mass [kg/g]; temperature [°C]; capacity [litres/ml] to the nearest unit, using rulers, scales, thermometers and measuring vessels. The children need to compare and order lengths, mass, volume/capacity and record the results using  $<$ ,  $>$  and  $=$

In **money** the children need to recognise and use symbols for pound [£] and pence [p]; and combine amounts to make a particular value. They also need to solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

In **time** the children need to compare and sequence intervals of time and tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. The children also need to know the number of minutes in an hour and the number of hours in a day. This work is for both analogue and digital clocks.

