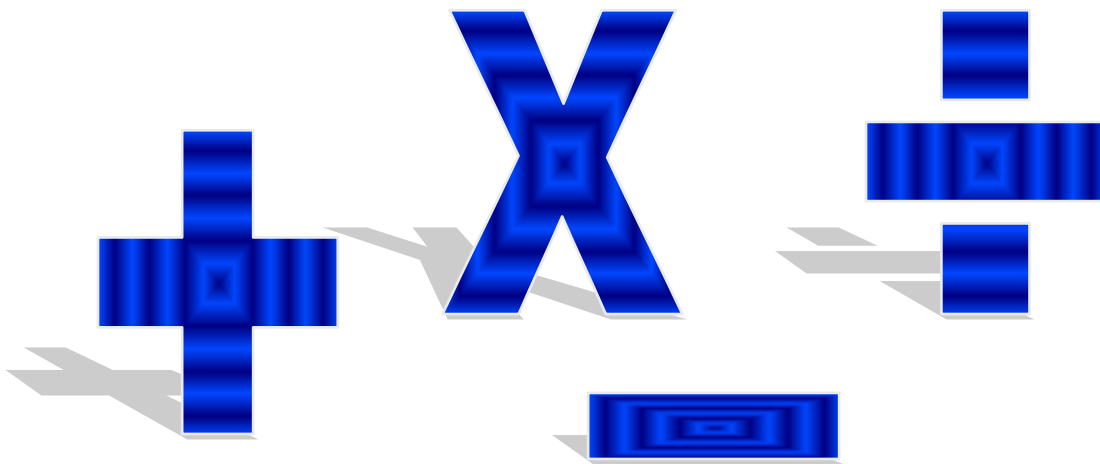




**Helping
your child
with calculations
in year 1.**




Calculation Policy for Parents.

This booklet has been designed as a guide for parents, to help them understand how the four operations (addition, subtraction, multiplication and division) are taught in our School.

The maths work your child is doing at school may look very different to the kind of 'sums' you remember. The teaching of maths is now about developing an understanding of number and not just knowing which kind of calculation to perform in a given situation. Initially children work through practical, oral and mental activities as children begin to understand these ideas they develop ways of recording to support their thinking. These informal methods become more efficient and succinct and lead to efficient written methods.

The calculation policy is organised according to age stage expectations as set out in the National Curriculum 2014, **however pupils will be taught according to the level that they are currently working at**, being moved onto the next level as soon as they are ready, or working at a lower stage until they are secure enough to move on. This means a pupil currently achieving below the average level is likely to be working at the level of year groups below, and vice versa for pupils working at above average levels. Please feel welcome to come and ask your child's class teacher to clarify with you the stages / methods your child is working on if you are unsure.

If your child gets 'stuck' on a particular stage it is always worth revisiting the previous stage or stages to review their understanding.



Talk to your child about how you work things out.

Ask your child to explain their thinking.

When faced with a calculation problem, encourage your child to ask...

1. Can I do this in my head?

2. Could I do this in my head using drawings or jottings to help?



4. Do I need to use a calculator?

3. Do I need to use a written method?

Also help your child to estimate and then check their answer. Encourage them to ask...

Is the answer sensible?



Addition - add with numbers up to 20

Children are taught to understand addition as combining two sets or more and counting on.

$$3 + 2 = \square$$

At a party I eat 3 cakes and my friend eats 2 cakes. How many cakes did we eat altogether?

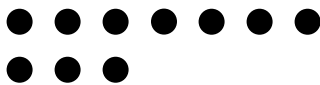


Children could draw a picture to help them work it out.

Children can count objects to help them work it out.

$$7 + 3 = \square$$

7 people were at the bus stop and 3 more people arrived. How many people are at the bus stop now?

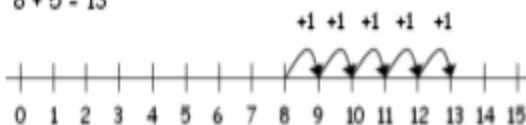


Or



Children could use dots or tally marks to represent objects (quicker than drawing pictures)

$$8 + 5 = 13$$



Children then begin to use number lines and are encouraged to count on from the largest number.

Key number skills:

- Read and write numbers to 100
- Recall bonds to 10 and 20, and addition facts within 20
- Count to and across 100
- Count in multiples of 1, 2, 5 and 10

Key vocabulary:

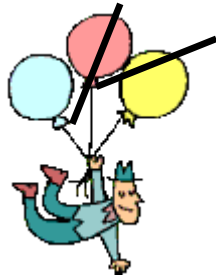
- add, more, plus, and,
- make, altogether, total,
- equal to, equals, double,
- most, count on, number line

Subtraction - subtract from numbers up to 20

Children are taught to understand subtraction as taking away (counting back) and finding the difference (counting up).

$$3 - 2 = \square$$

I had 3 balloons. Two burst. How many did I have left?



A teddy bear costs £5 and a car costs £2. How much more does the bear cost?



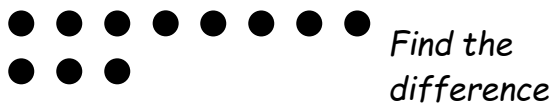
Drawing a picture helps children to visualize the problem.

$$8 - 3 = \square$$

Mam baked 8 biscuits. I ate 3. How many were left?

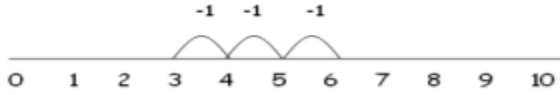


Thomas had 8 felt tips and Sarah had 3. How many more does Thomas have?



Using dots or tally marks is quicker than drawing a picture.

$$6 - 3 = \square$$



Children then move on to using numberlines. The numberline helps to show that we are looking for the difference between 6 and 3.

Key number skills:

Given any number, say one more or one less.

Count to and over 100, forward and back, from any number.

Represent and use subtraction facts to 20 and within 20 .

Subtract with one-digit and two-digit numbers to 20, including 0.

Key vocabulary: equal to, take, take away, less, minus, subtract, leaves, distance between, how many more, how many fewer / less than, most, least, count back, how many left, how much less is__?

Multiplication - Multiply with concrete objects, arrays and pictorial representations

Children are taught to understand multiplication as repeated addition and scaling. It can also describe an array.

$$2 \times 4 =$$

Each child has two eyes. How many eyes do four children have?

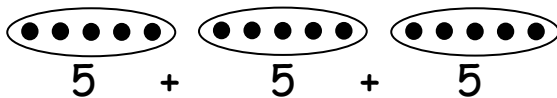


$$2 + 2 + 2 + 2$$

Drawing pictures is very useful to help children visualise the problem.

$$5 \times 3 =$$

There are 5 cakes in a pack. How many cakes are in three packs?



$$5 + 5 + 5$$

Dots or tally marks are often grouped. This shows 3 lots of 5.

Key number skills:

Count in 2's, 5's and 10's
Solve one step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Make connections between arrays, number patterns, and counting in twos, fives and tens.

Begin to understand doubling using concrete objects and pictorial representations.

Key vocabulary:

groups of, lots of, times, array, altogether, multiply, total, count up in...

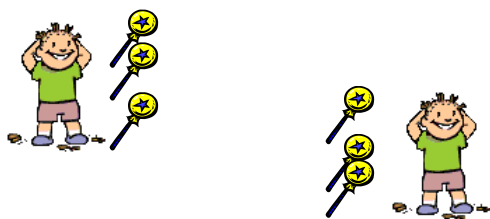
Division - group and share small quantities

Children are taught to understand division as repeated subtraction, sharing and grouping.

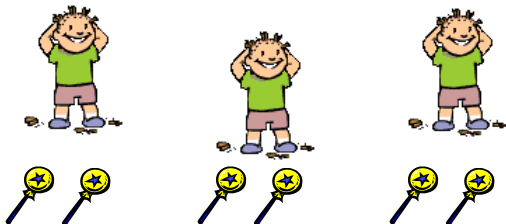
$$6 \div 2 =$$

6 lollies are shared between 2 children. How many lollies do they each get?

sharing between 2



There are 6 lollies. How many children can have 2 each? *Grouping in 2's*



Key number skills:

Solve one-step problems, calculating answers using concrete objects, pictorial representations arrays with support. Through grouping and sharing small quantities, begin to understand division, and find simple fractions of objects, numbers / quantities.

Make connections between arrays, number patterns, and counting in 2s, 5s and 10s.

Drawing often gives the children a way into solving the problem.

Practical things like sweets can also be used to 'share'.

Key vocabulary:

share, share equally, one each, two each..., group, groups of, lots of, array

