

St. Mary and St. Peter

### **Year One Calculation**

## Addition

Words we use... addition, add, more, and, make, sum, total, altogether, double, one more, two more ... ten more, equals, is the same as, number bonds/pairs, missing number

#### In Year One these are some of the ways we explore addition



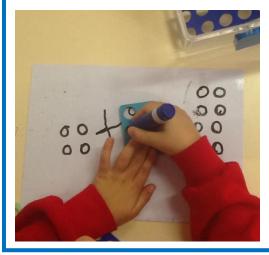


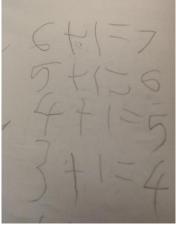


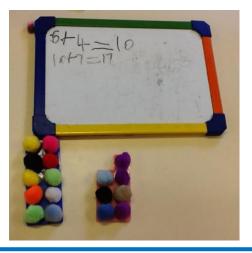
#### **How Year One learn Addition**

In Year One we use lots of objects to help us to count and add objects. We use numbers as names to show how many things are in a set that we have counted. We use equipment, drawings and number sentences to make our number bonds and related subtraction facts. We add one digit numbers (to 10), including zero. We read, write and interpret mathematical statements involving addition (+) and equals (=) signs. We solve one step problems that involve addition and subtraction, using objects and pictorial representations and missing number problems.

# In Year One we use these jottings and methods to solve our additions on paper







Fluency – this is about building up an understanding of how numbers work. It is great in year one if your child can know their number bonds (to 10) and their doubles and halves (to 10), but alongside this we encourage the children to be able to use the knowledge of what they know to work out unknown bonds. For example:

What number is hiding?

Using this picture make 4 number sentences 3+1=4, 1+3=4, 4-1=3, 4-3=1

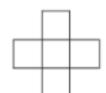


**Problem Solving** - importantly this is about working out ways to explore a problem. Children learn to work in a logical way and try out different ways to come to solutions. It is essential for problem solving that children are resilient and keep going even if they are finding the problem tricky. Here are some examples of addition problems for Year One.



I have 10p to spend. Which two items could I buy? List of all the different items I could buy together.

Write the numbers 1 to 5 in the squares so that each row and column add up to same number



Three birds each lay an odd number of eggs. They have 9 eggs altogether. Can you think of more than one way to do it? Use cubes to help you solve the problem. Write your answer in a number sentence.

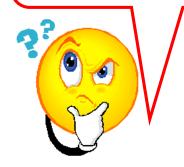




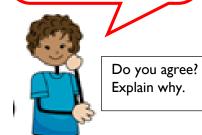


Reasoning - is about explaining thinking. Children are asked questions such as: "How do you know?", "Can you convince me this is true?", "What do you notice about these numbers?"and "Can you give another example?"

I am thinking of a number it is more than 5, less than 20 and even. What could it be? How do you know?



If you add 0 to a number, the number stays the same.



If you add together four 0's the answer is 4.



What do you think? Can you explain your answer?