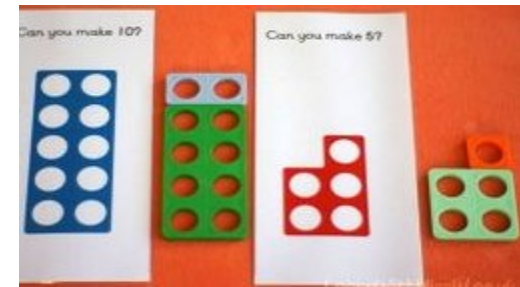
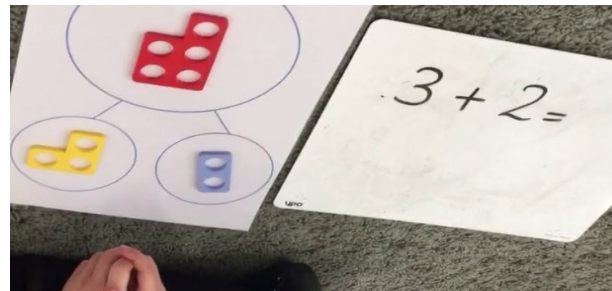
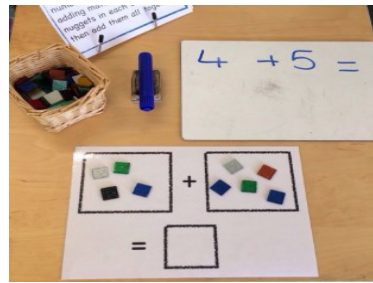
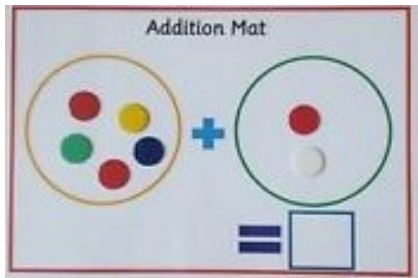


EYFS Stage:

Addition

Concrete:

We encourage the children develop number sense to enable them to calculate numbers mentally. We embed the children's understanding of the numbers to 5, to 10 and then to count to 20. The children will use pictorial resources initially to help with counting and then develop ways of recording using practical / physical resources, when they are secure with 1:1 correspondence and then use numbers in a number sentence.



Pictorial



$$6 + 6 = 12$$

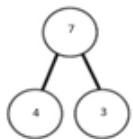


$$4 + 3 = 7$$

The children will use all the pictures to count the amount to find the answer.

Abstract

$4 + 3 = 7$
Four is a part, 3 is a part and the whole is seven.



Once the child has a strong understanding of number, they will be able to use the numbers to answer calculations mentally. E.g. start at 4 and count on 3.

We can:

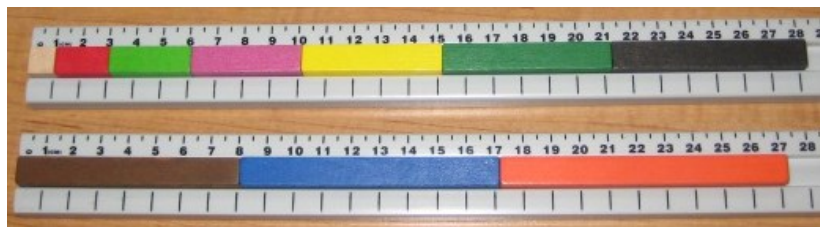
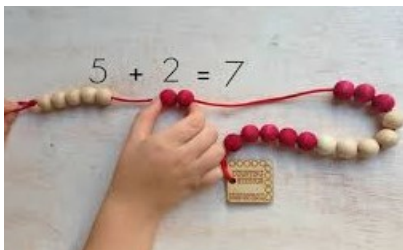
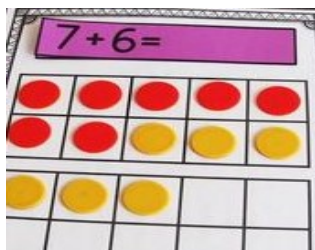
- ✓ Have a deep understanding of the numbers to 10
- ✓ Subitise up to 5
- ✓ Find the number 1 more
- ✓ Solve number bond problems to 5
- ✓ Solve number bond problems to 10
- ✓ Solve some doubling problems to 5
- ✓ Use the language of more and less to compare quantities to 10
- ✓ Find the total of two items in two groups by counting all of them
- ✓ Find the number 1 more

Stage 1 :

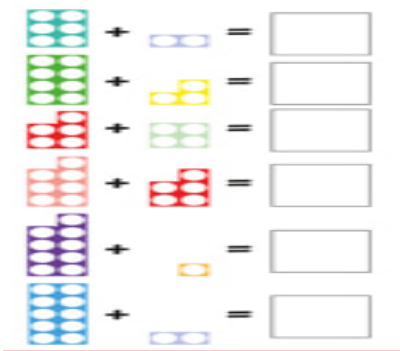
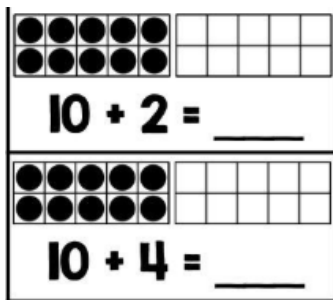
Addition

Concrete:

The children continue to use concrete apparatus to consolidate counting on for addition. This then enables the children to use number line for solving addition number sentences and problem solving. At Springfield we use the number line method for addition calculations.

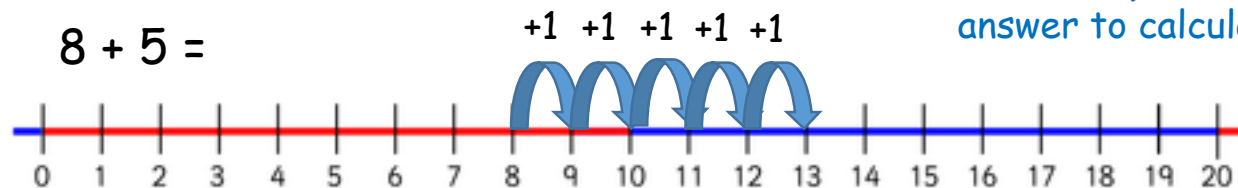


Pictorial:



The children will use the pictures to count on the amount to find the answer.

Abstract:



The children use number lines (pre-numbered) to count on and find the answer to calculations.

We can:

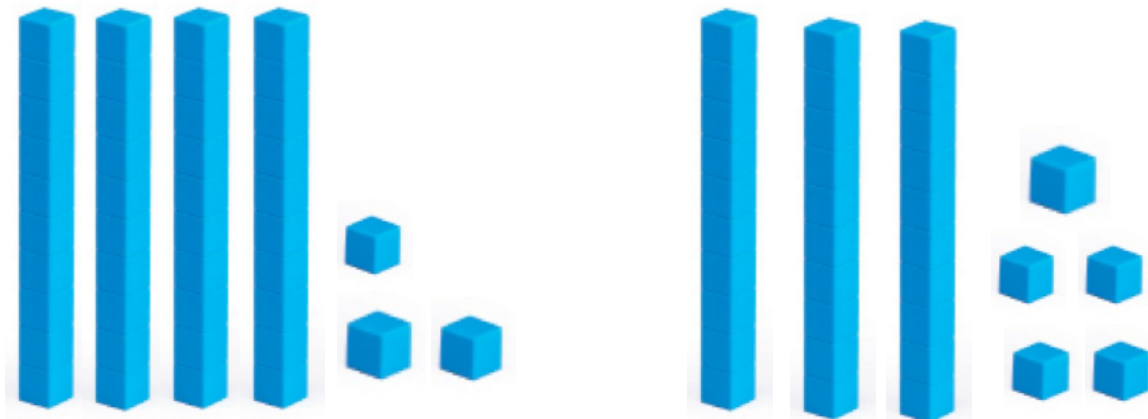
- ✓ Recall and solve problems with number bonds to 10
- ✓ Represent and use number bonds within 20
- ✓ Add 1 and 2 digit numbers to 20
- ✓ Have an understanding of commutativity e.g. $3 + 2 = 5$ so $2 + 3 = 5$
- ✓ Solve 1 step problems that involve addition and missing numbers

Stage 2 :

Addition

Concrete:

$43 + 35 =$

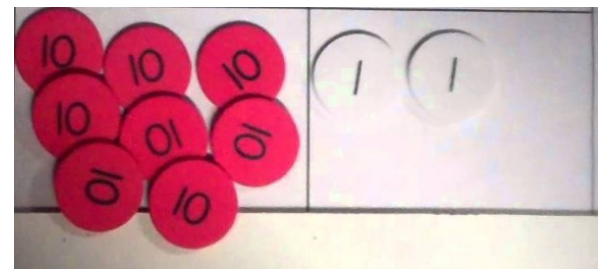


$34p + 26p =$



The children use practical resources to secure their understanding of 2-digit numbers. This prepares them for calculating with larger, 2-digit numbers. The base 10 materials or dienes as well as money supports at this stage.

The children work on partitioning a 2-digit number into its 10s tens and ones.



We can:

- ✓ Add a 2-digit number and ones
- ✓ Add a 2-digit number and tens
- ✓ Add two, 2-digit numbers together
- ✓ Add three, 1-digit numbers
- ✓ Understand the commutative principle
- ✓ Solve missing number addition problems

Stage 2 :

Addition

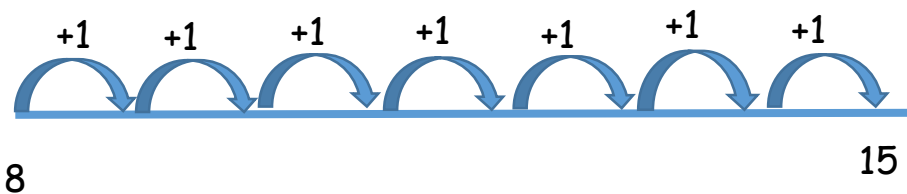
Pictorial:

10s	1s
	.
4
4	9

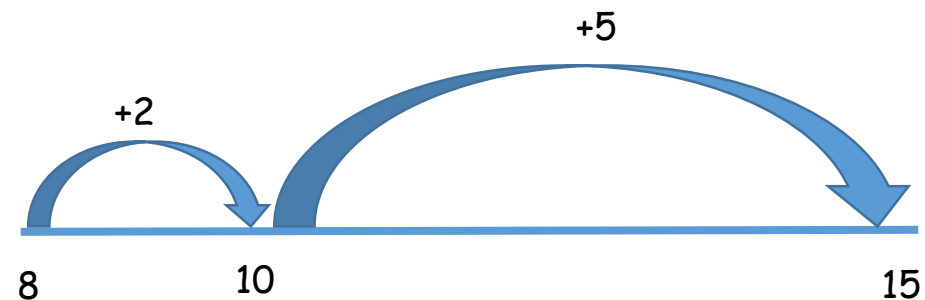
The children then start to represent their numbers pictorially by the tens number being represented as a line and the ones number being represented as dots. The children then combine the numbers together starting with the tens and then adding on the ones to get the final answer.

Abstract:

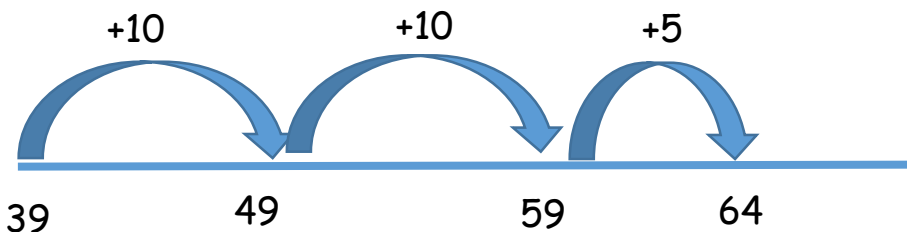
$$8 + 7 =$$



OR



$$39 + 25 =$$



The children use blank number lines as a visual representation of their mental calculations. It is really important that the children have a secure place value understanding. This method works for addition where no regrouping and where regrouping is required. There is no need for exchanging as the children count on.