



St. Mary and St. Peter

Year Four Calculation

Subtraction

Words we use...

less, take away, decrease, how many more, subtract, find the difference, How many are left/left over? How many have gone? Equals, inverse

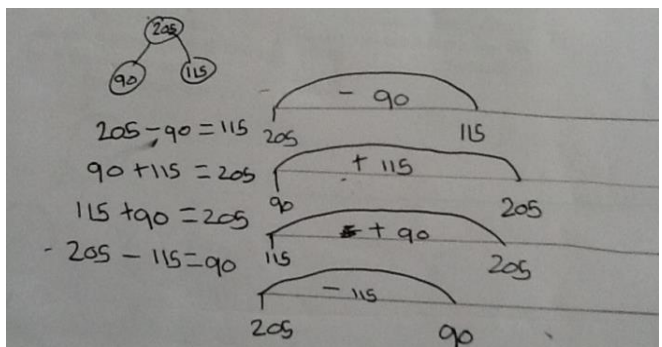
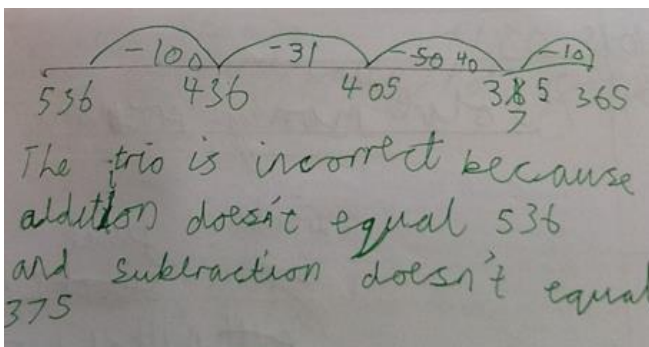
In Year Four these are some of the ways we explore subtraction



How Year Four learn subtraction

In Year 4 subtraction is taught alongside addition. Children explore how subtraction is the inverse of addition. Although addition can be done in any order, it is important to the answer which number is taken from which with subtraction. Children use their knowledge of place value and structured equipment, such as numicon, denes and bead strings to support their calculations. They split numbers up in various ways. Unmarked number lines are used extensively to support children in becoming confident in both written and mental calculations. Estimation is used to support the children in thinking about how sensible an answer is and using the inverse to check their work. Children solve subtraction two step problems in context and deciding which operations and methods to use and why.

In Year Four we use these jottings and methods to solve our subtractions on paper



Fluency – this is about building up an understanding of how numbers work. In Year 4 children are taught to think about which is the most efficient way to solve a problem.

For example:

Estimate how many thousand in the answer to each of these questions? Now check using a numberline.

$$4428 - 3214$$

$$7821 - 2941$$

How would you solve this problem?

What calculation would you need to do?

1034	
578	?

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 subtraction problems for Year 4.

There is a difference of 72p between the coins in Sam and Mary's money boxes. Both have less than £1. How much could each of them have?



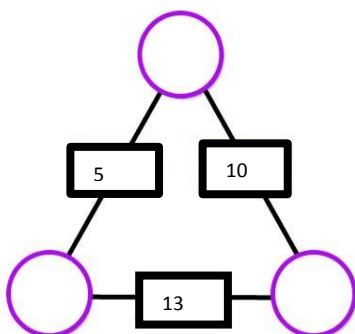
Alice is trying to complete a sticker book. It needs 350 stickers overall. She has 134 in the book and a further 74 ready to stick in. How many more stickers will she need?



Always, Sometimes, Never

When you decrease a number by a hundred the digit in the hundred column always goes down by one.

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?”



The boxes show the answers to the addition of the numbers in the circle. What could the numbers in the circles be?

5129 – 3372 = 2257 because:

$$5000 - 3000 = 2000$$

$$300 - 100 = 200$$

$$70 - 20 = 50$$

$$9 - 2 = 7$$

so 5129 - 3372 is 2257

The difference between two odd numbers is odd.

Is this always sometimes or never true?

Do you agree? Explain why.

