

Y3 Maths What they need to know...

By the end of this term, some children will have been taught, and be able to use the formal written column methods for addition and subtraction, using numbers with up to 3-digits. The school calculation policy (found on the website) explains these processes in more detail. However, until children are secure with number bonds and have a solid understanding of place value they will not yet be moving on to this and will instead focus on developing these skills. There continues to be a big focus on developing the children's mental calculation strategies, using a variety of resources (such as base 10 and place value counters) to support them. It is important that children recognise when they can do a calculation in their heads, and don't need to work it out with a formal written method. Some of these strategies include: near doubles (e.g. $80 + 79 = 160 - 1 = 159$); adding to the nearest 10 first, by partitioning the second number (e.g. $56 + 8 = 56 + (4 + 4) = (56 + 4) + 4 = 60 + 4 = 64$); partitioning numbers mentally into hundreds, tens and ones (e.g. $245 + 123 = 200 + 100 + 40 + 20 + 5 + 3 = 368$); subtraction as the difference between, by starting with the smallest number and counting on in useful chunks (e.g. $83 - 54 = 6 + 10 + 10 + 3 = 29$); subtraction by partitioning the second number mentally (e.g. $276 - 49 = 276 - 40 - 9 = 236 - 9 = 227$).

Activities & Games:

★ The answer is 800. Using only multiples of 100, how many different ways can you get the answer? You must include examples of both addition and subtraction.

★★ Choose a starting number that is less than 50. A grown up is now going to 'conduct' your counting by directing you to count forwards or backwards in either ones, tens or one hundreds. They can change the rule as many times as they like! What number did you finish on?

★★ Alice started with a number between 670 and 680 and ended with the answer 673. What calculation could she have done? Find all the possible solutions.

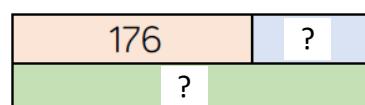
★ Explain to a grown up, using a place value chart and counters, how you would solve $456 + 7$.

Hundreds	Tens	Ones
● ●	● ●	● ● ●

★★ Teach someone how to solve these calculations: $765 + 2$; $538 + 7$; $879 - 5$; $384 - 9$. Which ones are harder to solve? Have a go at explaining why they are harder.

★★★ Complete this bar model (use the size of the bars as a guide):

Now write one addition and one subtraction number story to go with it.



★ Anisa used the column method to complete this sum.

Was this the most efficient method?

What would have been a better strategy to use?

2	5	1
+		4
2	5	5

★★★ A group of children were given the calculation $374 + 37$ to solve. How many different strategies (both written and mental) can you think of to solve this sum?

★★ Roll a 1–6 dice. Fill in any box each time you roll

Can you make a total that is:

			+				=
--	--	--	---	--	--	--	---

- an odd number?

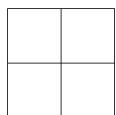
- an even number?

- a multiple of 5?

- the greatest possible number?

Going deeper...

Here is a grid of four boxes:



You must choose four different digits from 1–9 and put one in each box. For example:

This gives four two-digit numbers:

52 (reading along the 1st row)

19 (reading along the 2nd row)

51 (reading down the left hand column)

29 (reading down the right hand column)

In this case their sum is 151 .

5	2
1	9

Try a few examples of your own. Is there a quick way to tell if the total is going to be even or odd?

Your challenge is to find four different digits that give four two-digit numbers which add to a total of 100 .

How many ways can you find of doing it?

Wonderful websites

My Maths

Use our school log in (Username: **coleridge1**, Password: **success74**), and then your own log in details to access activities related to our current topic on the MyMaths website. You can also have a look to see if there are some other fun games you would like to play.

[Subtraction Grids](#)

[Fish Bowl](#)

[Timed Game](#)

[Number Bonds](#)

[Mental Maths Conveyor Belt](#)

[Number Fact Families](#)

[Subtraction Game](#)

Whilst it can be very tempting to encourage your child to have a go at the more challenging activities, it is far better to work with them at a level they feel confident with. Significant and regular practice of even the most basic skills outlined in this document will lead to a much deeper understanding and greater proficiency, and ultimately a much more pleasant ‘homework’ experience for you and your child!