



Year 4



Number

Children are expected to:

- ◆ **Count in multiples of 6, 7, 9, 25 and 1000.**
- ◆ **Find 1000 more or less than a given number.**
- ◆ **Count backwards through zero to include negative numbers.**
- ◆ **Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones).**
- ◆ **Order and compare number beyond 1000.**
- ◆ **Identify, represent and estimate numbers using different representations.**
- ◆ **Round any number to the nearest 10, 100 or 1000.**
- ◆ **Solve number and practical problems that involve all of the above and with increasingly large positive numbers.**
- ◆ **Read Roman numerals to 100 (1 to C) and know that over time, the numeral system changed to include the concept of zero and place value.**

Building on the learning from KS1 and Year 3, children are now expected to know and use the multiples of all numbers from 1-12 as well as 25, 50, 100 and 1000. Using their knowledge of partitioning three-digit numbers into hundreds, tens and ones, they are able to apply this knowledge to four-digit numbers and understand the value of the digit in the thousands column.

These objectives are taught using practical objects and manipulatives and through the use of games, songs and interactive activities.

The children are encouraged to partition four-digit numbers in different ways and continue to develop their understanding of zero as a place holder.

It is important that the children have a deep understanding of these objectives in order to successfully access the calculation objectives. Therefore lots of time is spent in school embedding basic number facts and ensuring that the children have a deep understanding of place value (the value of each digit in a multi-digit number).



addition and subtraction

Children are expected to:

- ◆ **Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.**

Building on their understanding from Year 3, where they used the column method for addition and subtraction with three-digit numbers, the children now apply this method to solve addition and subtraction problems involving four-digit numbers.

Children should consolidate their understanding of the efficient **column addition and subtraction methods**, however, if at any point they are struggling they should revert back to the expanded method or the use of practical base 10 resources to support their understanding.

							7	5		
	4	9	2	4			7	8	6	14
+	3	7	9	3		-	2	4	9	8
	8	7	1	7			5	3	6	6
	1	1								

Children should also use the column addition and subtraction method to add and subtract numbers with up to 2 decimal places (at this stage both number should have the same number of decimal places).

									4				
	1	3	6	.	4	2			3	5	13		
+	3	4	4	.	5	9		-	2	7	.	4	7
	4	8	1	.	0	1			1	2	.	0	6
		1	1			1							

Children must remember to keep the **decimal point** in the same place.



addition and subtraction

Children should also be able to use the column addition method to add more than 2 numbers and numbers that have different numbers of digits.

5	2	7	4		9	4	2	6		3	2	6	1
3	4	3	9		3	8	7	9				4	7
+	2	6	1	3	+	2	9	0	9	+	1	3	2
1	1	3	2	6	1	6	2	1	4	3	4	4	0
	1	1	1			2	1	2			1	1	

◆ **Estimate and use inverse operations to check answers to a calculation.**

Children are encouraged to estimate the answer to a calculation prior to solving it.

For example: $3,263 + 1,272 =$



I can use my rounding skills to estimate that the answer will be slightly more than 4000 or more accurately around 4400 if I round to the nearest 100.



I know that my answer is correct because $4,535 - 1,272 = 3,263$



Year 4



addition and subtraction

- ◆ **Solve addition and subtraction two-step problems in contexts, deciding which operations to use and why.**

Children solve a range of 1 and 2 step problems involving addition and subtraction. They are taught how to approach problems using Reasoning Ralf (see separate document for details).

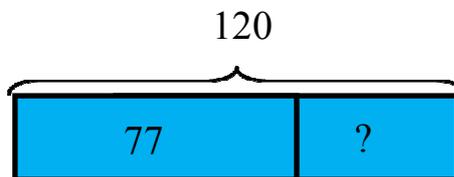
The use of **bar models** to represent problems enables the children to easily identify the correct operation needed to solve the problem. A missing whole = addition, a missing part = subtraction.

Seb has a box of **120** cubes.

He uses some of the cubes to build a tower.

77 cubes are left over.

How many cubes has he used?

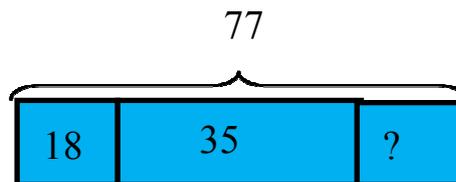


Seb has **77** cubes left over.

He builds two more towers.

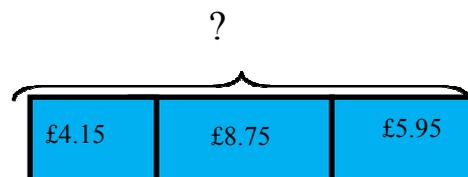
One tower uses **18** cubes and the other uses **35** cubes.

How many of his **77** cubes has he got left now?



The table shows the cost of a new football kit.

Item	Cost
Shirt	£8.75
Shorts (1 pair)	£5.95
Socks (1 pair)	£4.15



Altogether, how much does the complete football kit cost?

Key vocabulary and symbols

Place value, digit, thousands, hundreds, tens, ones, zero, Roman numeral, estimate, number line, more, less, positive, negative, decimal place, addition, subtraction, sum, total, difference, minus, less, column addition, column subtraction, exchange, operation, $<$, $>$, $-$, $+$, $=$.