

Key Stage 1 – Addition

Y1

Through practical activities in meaningful contexts and informal written methods.

- Recall number bonds to 20 and within 20.
- Pictures and Marks – 1 more / 2 more.
There are 3 cars in the garage. 1 more came along.

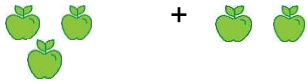


$$3 + 1 = 4$$



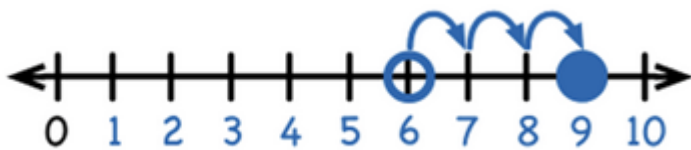
$$4 + 1 = 5$$

Terry has 3 apples and Tony has 2 apples. How many altogether?



- Number lines to 20.

$$6 + 3 = 9$$



- Derive related facts to 20.

$$\square = 5 + 4$$

$$5 + 4 = \square$$

$$\square + 4 = 9$$

$$\square + \square = 9$$



- Money and addition up to 20p.

- Read, write and interpret mathematical statement involving addition (+) and equals (=).

Video clips:

[Using a range of equipment and strategies to reinforce addition statements](#)

National Curriculum requirements:

Add 1 digit and 2 digit numbers to 20, including 0.

Y2

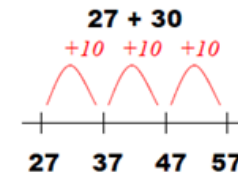
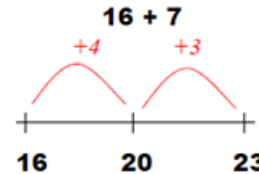
Through practical activities in meaningful contexts and informal written methods.

- Fluent recall of bonds to 20 and within 20.
- Derive and use related facts up to 100.

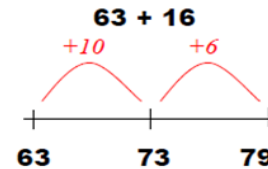


- Addition of money up to £1.

- Add numbers using concrete objects, pictorial representations and mentally.



- Show that addition of two numbers can be done in any order (commutative).
- Recognise and use the inverse relationship between addition and subtraction.
- Progressing to partitioned columnar method (in preparation for year 3).



20	+ 3	
+ 30	+ 4	
50		+ 7
		= 57

National Curriculum requirements:

(using concrete objects, pictorial representations and mentally)

Add 2 digit numbers and ones.

Add 2 digit number and tens.

Add two 2 digit numbers.

Add three 1 digit numbers.

Key Stage 2 – Addition

Y3

- Continue with partitioned columnar method.
- Introduce expanded columnar addition.

H	T	O
2	3	6
+	7	3
		9
1	0	0
2	0	0
3	0	9

Progressing to the compact columnar method.

T O	H T O	T O	H T O	T O	H T O
23	315	94	561	47	237
+ 42	+ 624	+ 73	+ 718	+ 25	+ 516
<u>65</u>	<u>939</u>	<u>167</u>	<u>1279</u>	<u>72</u> 1	<u>753</u> 1

- Add money using both £ and pence in practical contexts.

Video clip:

[Demonstration of expanded 3 digit columnar addition](#)

National Curriculum requirements:

Add numbers with up to 3 digits, using the formal written method of columnar addition.

Y4

- Continue with columnar addition.

H T O	H T O	Th H T O
371	376	2388
+ 485	+ 485	+ 1124
<u>856</u> 1	<u>861</u> 1 1	<u>3512</u> 1 1

- Estimate and use inverse operations to check answers to a calculation.
- Add money using both £ and pence in practical contexts.

National Curriculum requirements:

Add numbers with up to 4 digits, using the formal written method of columnar addition.

Key Stage 2 – Addition

Y5

- Continue to use columnar addition, adding numbers with more than 4 digits.

$$\begin{array}{r} 3 \quad 2 \quad 8 \quad 7 \quad 9 \\ + \quad 3 \quad 5 \quad 9 \quad 8 \quad 7 \\ \hline 6 \quad 8 \quad 8 \quad 6 \quad 6 \end{array}$$

- Addition of money and decimals.

$$\begin{array}{r} \text{£} 23.59 \\ + \text{£} 7.55 \\ \hline \text{£} 31.14 \end{array}$$

$$\begin{array}{r} 19.01 \\ \quad 3.65 \\ + 0.70 \\ \hline 23.36 \end{array}$$

National Curriculum requirements:

Add whole numbers with more than 4 digits, using the formal written method of columnar addition.

Y6

- Add several numbers of increasing complexity using columnar addition.

$$\begin{array}{r} 23.361 \\ \quad 9.080 \\ 59.770 \\ + \quad 1.300 \\ \hline 93.511 \\ \begin{array}{l} 2 \quad 1 \quad 2 \end{array} \end{array}$$

$$\begin{array}{r} 81,059 \\ \quad 3,668 \\ \quad 15,301 \\ + 20,551 \\ \hline 120,579 \\ \begin{array}{l} 1 \quad 1 \quad 1 \quad 1 \end{array} \end{array}$$

National Curriculum requirements:

Add whole numbers with more than 4 digits, using the formal written method of columnar addition.