

Numeracy at School

Addition & Subtraction

- Having problems with homework?
- Can't understand our methods?

"This isn't the way we did sums when we were at school!"

Have a look at our Maths guidelines leaflet.
Hopefully it will help!

Numeracy Websites

Here are some useful websites that include various games and activities to support Numeracy work for Years 3 to 6.

www.topmarks.co.uk

<https://www.bbc.co.uk/bitesize/subjects/z826n39>

<https://play.ttrockstars.com/auth/school/student>

www.echalk.co.uk/Maths/maths.aspx

<https://mathszone.co.uk>

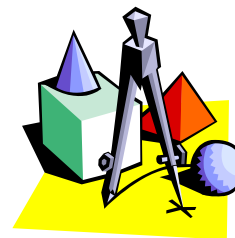
<https://mathsframe.co.uk>

<https://resources.hwb.gov.wales/VTG/2017/CiparFat>

hemateg/ca2_menu.html

<https://cynnal.co.uk/gweithgareddauRhesymu/>

<https://www.schoolgames.io/edu/speed-grid-challenge-addition/5200240/>





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Year 2 methods

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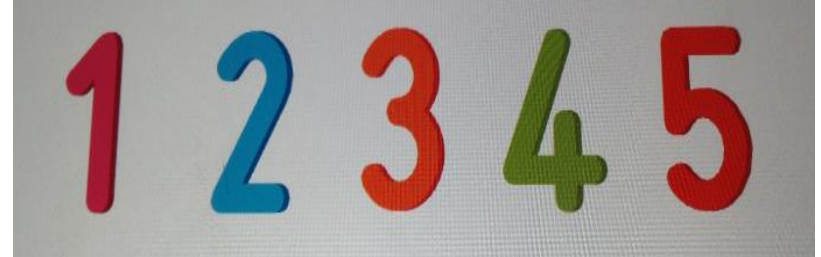
Year 4 methods

Year 5 methods

Year 6 methods



- Recite numbers from 1 to 10.
- Write numbers from 1 to 5.



- Name and order numerals to at least 5.
- Add and subtract one object, from a set of up to 5 objects.
- Form numbers and Count reliably up to 5 objects.



Reception Addition & Subtraction

- Reading, writing and counting up to 10.

Forming Numbers

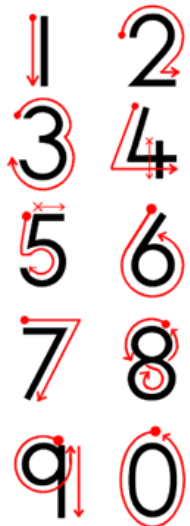
It is important that you encourage your child to form numbers correctly. I hope that the following guidelines will assist you as parents/guardians when helping your child form numbers at home.

The red dot denotes the starting point to form the number with a pencil.

The pencil should always stay on the paper following the path of the arrows.

When forming number 4 the pencil must be raised in order to complete the second part of the number. The red cross denotes the second starting point.

If you need further information/advice please contact your child's classroom teacher.



- Form numbers up to 10 correctly using the above guidelines.

- Understand the meaning above, below, near and middle.

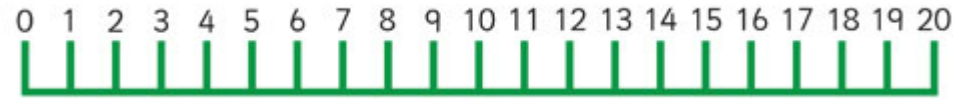
- Introduce simple patterns ex. Every other - red, blue, red, blue. In pairs - red, red, blue, blue.

- When practicing counting forwards with your child always start with the largest number ex. 3 + 2 start with 3 then add 2 (say 4 then 5.)

Year 1 Addition & Subtraction



- Reading, writing and counting forwards and backwards to 20.



- Learn Number Bonds of 10.

0	1	2	3	4	5
10	9	8	7	6	5

- Adding and subtracting numbers using up to 10 objects.

e.x. Add 2 objects and 3 objects together makes....



e.x. 3 objects take away 1 object leaves.....



Year 2 Addition & Subtraction



- Reading, writing and counting forwards and backwards to 100.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- Continue to revise number bonds of 10 in order to add similar numbers to 100.

e.x. $7 + 3 = 10$ $70 + 30 = 100$

- Understand that subtraction is the inverse (opposite) method of addition.

e.x. $6 + 4 = 10$ so $10 - 4 = 6$ or $10 - 6 = 4$

Year 2 Addition & Subtraction



- Using number factors that they know to help them count out new answers.

e.x. $7 + 7$ is 14, so $7 + 8$ (1 more) is 15.

If $5 + 3 = 8$ so $15 + 3$ (ten more) = 18

- Add and subtract numbers less than 10 in their heads, then move forward with the ability to add and subtract numbers up to 20;

e.x. What is $2 + 4$? or What is $7 - 3$?

Useful Websites

- <https://www.topmarks.co.uk/maths-games/daily10>
- <https://www.topmarks.co.uk/maths-games/5-7-years/counting>
- <https://www.topmarks.co.uk/maths-games/mental-maths-train>
- <https://www.topmarks.co.uk/maths-games/hit-the-button>
 - <https://mathsframe.co.uk/en/resources>
- <http://resources.woodlands-junior.kent.sch.uk/maths/>
 - <http://www.maths-games.org/>
- <https://www.bbc.co.uk/bitesize/subjects/zjxhfg8>
 - <https://www.coolmath4kids.com>
- <https://cynnal.co.uk/gweithgareddauRhesymu/>

You can also download the Cyw app – **Cyfri gyda Cyw.**

Year 3 Addition & Subtraction

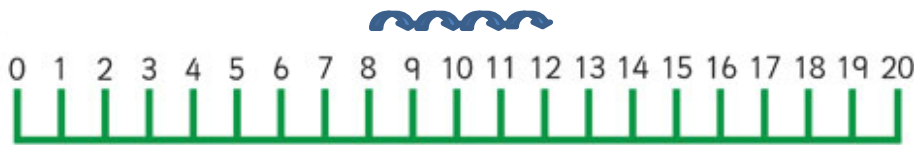


- Reading, writing and counting forwards and backwards to 1000.
- Horizontal sums, with numbers missing.

e.x. $12 + 3 = \square$ $8 + \square = 15$

- Use a number line to add (in steps)

e.x. Start at 8 and add 4 = $\square$



- Partition two digit numbers into Tens and Units.

e.x. $24 + 13 = 24 + 10 + 3 = 37$

$124 + 25 = 124 + 20 + 5 = 149$

- Introduce vertical addition and carrying over.

e.x.
$$\begin{array}{r} \text{T U} \\ 34 \\ + 25 \\ \hline 59 \end{array}$$

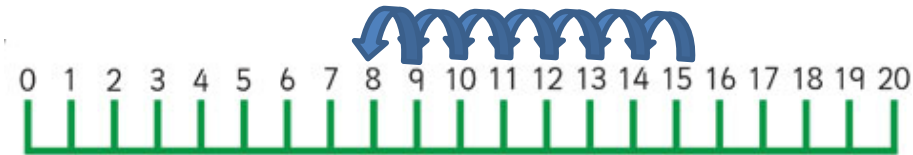
$$\begin{array}{r} \text{T U} \\ 79 \\ + 13 \\ \hline 92 \\ 1 \end{array}$$

Year 3 Addition & Subtraction



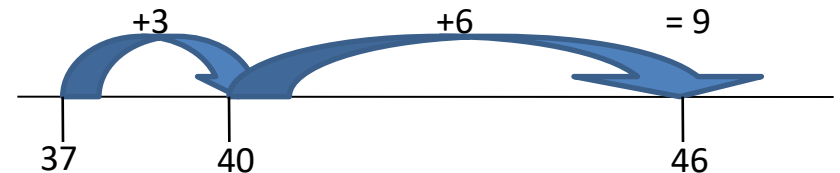
- Use a number line to subtract (in steps).

e.x. Start at 15, take away 8 = $\square$



- Use a blank number line to find small differences by counting up from the smallest number.

e.x. $46 - 37 = 9$



- Introduce vertical subtraction.

e.x. $34 - 18 =$

$$\begin{array}{r} 21 \\ 34 \\ - 18 \\ \hline 16 \end{array}$$

Year 4 Addition & Subtraction



- Reading, writing and counting forwards and backwards to 10,000.
- Keep using Year 3 methods to ensure understanding of compact methods by developing larger numbers.

e.x.

	T	U
	5	4
+	3	3
	8	7

H	T	U
	6	8
+	5	3
1	1	1
1		

- Leading on to compact methods, up to HTU + HTU

H	T	U
	1	2 8
+	2	3 7
	3	6 5
1		

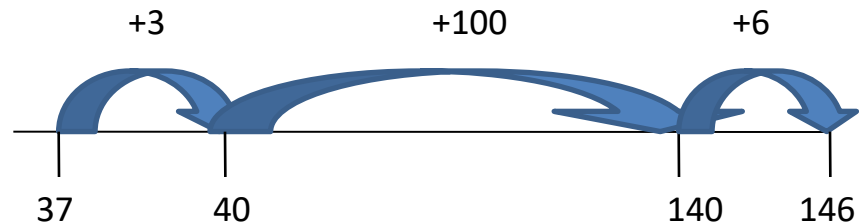
- * - Use of language is very important! Do the children know the value of each number? e.g. 8 add 7 equals 15, write down 5 and carry 10. 20 add 30 equals 50, plus the extra 10 is 60. Finally 100 add 200 equals 300)

Year 4 Addition & Subtraction



- Revision of the number line, counting up from the smallest number

e.x. $146 - 37 = 3 + 6 + 100 = 109$



- Leading on to develop compact methods with tens and hundreds.

e.x. $125 - 38 = 87$

	0	11	1
	1	2	5
-		3	8
		8	7

- Introduce vertical addition and subtraction with money.

e.x.

	6	1
£4.36	£7.39	
+ £2.17	£3.64	
£6.53	£3.75	
1		

Year 5 Addition & Subtraction



- Reading, writing and counting forwards and backwards to 100,000.
- Continue using Year 4 methods to ensure understanding of compact methods, by developing larger numbers.

e.x.

	H	T	U
	2	5	4
+	1	3	3
	3	8	7

Th	H	T	U
2	4	6	8
+	1	7	5
	4	2	2
	1	1	1

- Leading on to compact methods, to 100,000

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

- Developing vertical addition and subtraction with money and measurements.

e.x.

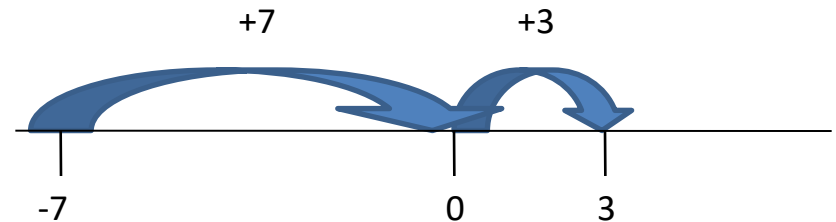
£24.35	2 1 0 1
+ £14.26	36.14 km
£38.61	- 28.09 km
1	08.05 km

Year 5 Addition & Subtraction



- Use a number line to find differences between positive and negative numbers.

e.x. -7 to 3 = 10



- Use inverse method to check for accuracy.

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

8 1	8 1
9 1 6 9 4	9 1 6 9 4
- 3 7 5 6 6	or - 5 4 1 2 8
5 4 1 2 8	3 7 5 6 6

- Able to discover differences between numbers with one decimal place.

e.x.

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

Year 6 Addition & Subtraction



- Reading, writing and counting forwards and backwards to 1,000,000.
- Continue methods from Y5 to ensure understanding of compact method, developing to larger numbers.

e.x.
$$\begin{array}{r} 947237 \\ + 369485 \\ \hline 1,316722 \\ \text{1 1 1 1} \end{array}$$

- Develop addition of decimals, understanding the place value

e.x.
$$\begin{array}{r} 3869.46 \\ + 492.23 \\ \hline 4361.69 \\ \text{1 1 1} \end{array}$$

$$\begin{array}{r} 47.68 \\ 72.942 \\ + 6.27 \\ \hline 126.892 \\ \text{1 1 1} \end{array}$$

- Develop vertical methods of subtraction from Y5.

e.x.
$$\begin{array}{r} 6111 \\ 725247 \\ - 87235 \\ \hline 638012 \end{array}$$

- Develop subtraction of decimals.

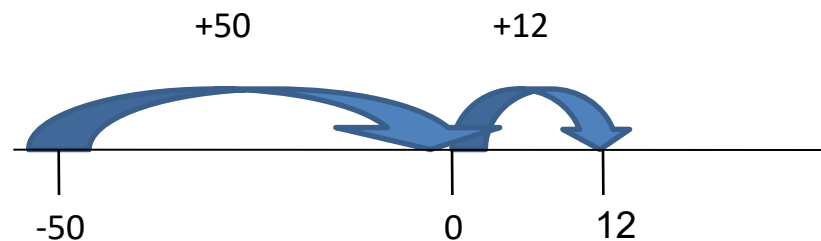
e.x.
$$\begin{array}{r} 4161 \\ 3572.76 \\ - 287.32 \\ \hline 3285.44 \end{array}$$

Year 6 Addition & Subtraction



- Use a number line to find differences between positive and negative numbers.

e.x. -50 to $12 = 62$



- Use inverse method to check for accuracy.

$\begin{array}{r} 454128 \\ + 127566 \\ \hline 581694 \\ \text{1 1} \end{array}$	$\begin{array}{r} 71 \quad 81 \\ 80694 \\ - 37566 \\ \hline 43128 \end{array}$	or	$\begin{array}{r} 61 \quad 81 \\ 71597 \\ - 44178 \\ \hline 27419 \end{array}$
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- Able to discover differences between numbers with two decimal places.

e.x.
$$\begin{array}{r} 15 \quad 1 \quad 8 \quad 1 \\ 16279.37 \\ - 7552.84 \\ \hline 8726.53 \end{array}$$