

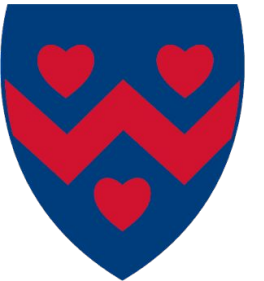
THE ORATORY
PREP SCHOOL

Maths Information

Year 2

We will cover

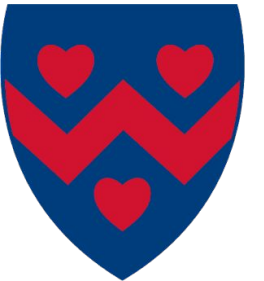
- Scheme of work
- Assessment
- Vocabulary
- Key methods taught & equipment used
- Useful websites and Apps



Scheme of work

As a school we use White Rose Maths as a guide for our maths teaching. This is then supported by a number of other schemes such as Hamilton, Abacus and Maths on target.

In Year 2, the children learn through a spiral scheme, covering all areas multiple times, with each visit deepening their understanding.



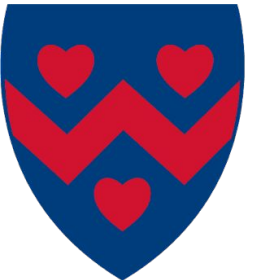
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
Michaelmas	Place value	Addition and subtraction CAT4 testing (week 2)		2D shapes and symmetry	Comparing and ordering numbers	Fractions	5 times tables Half term assessment	Money	Time – o'clock and half past	Doubling and halving	Measuring: Length	Data: Tally graphs End of term assessment	Christmas themed maths
Lent	Place value	Fractions - quarters	Time - quarter to and past	Addition and subtraction		3D shapes Half term assessment	Measure - Mass	Multiplication - counting in 3s	Temperature	Data: Pictograms			
Summer	Symmetry and Pattern	Addition and Subtraction		Time - duration PTM assessment	Fractions - thirds & equivalent	Measure - volume	Multiplication & division		Data: block diagrams	End of Year - transition work			

Assessment

So as to monitor the children's progress they will have half termly and end of term tests, assessing their understanding of the areas covered and providing us with a clear picture in their knowledge.

The children will also have a weekly mental arithmetic test, which will develop their understanding of vocabulary and application of their in class learning to a 10 question weekly test.

In addition, the children complete a PTM test in May 2023, giving them a standardised score (a score indicating where they stand nationally, against their age)



Vocabulary

+

Add
Addition
Plus
Total
Sum of
Calculate

-

Subtract
Minus
Take away
Difference
Reduce

x

Multiply
Multiple
times
double

÷

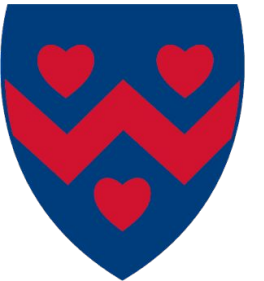
Halve
Group
share
Divide
Division

Other

Hundreds
Tens
Ones
Partition
Area
Perimeter
2D & 3D shapes

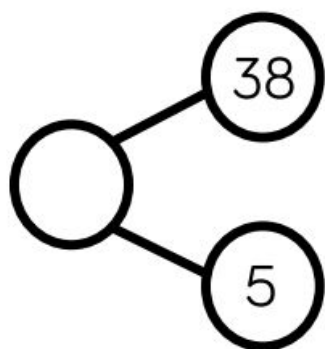


These are the key methods that we use to help teach the students new concepts. As you can see we teach them a range of different approaches to allow them to which method they prefer.

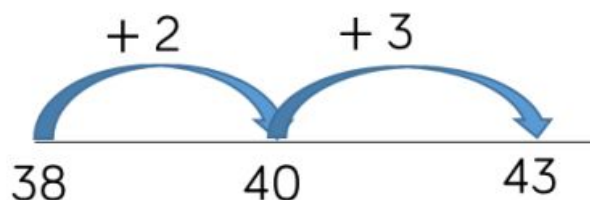
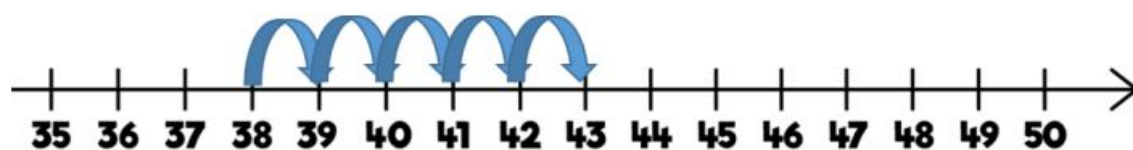


Skill: Add 1-digit and 2-digit numbers to 100

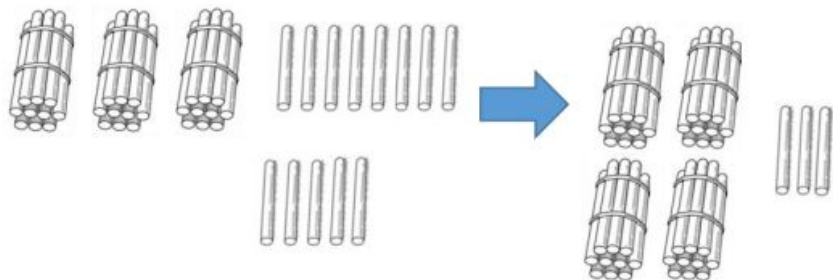
Year: 2/3



?



$$38 + 5 = 43$$



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

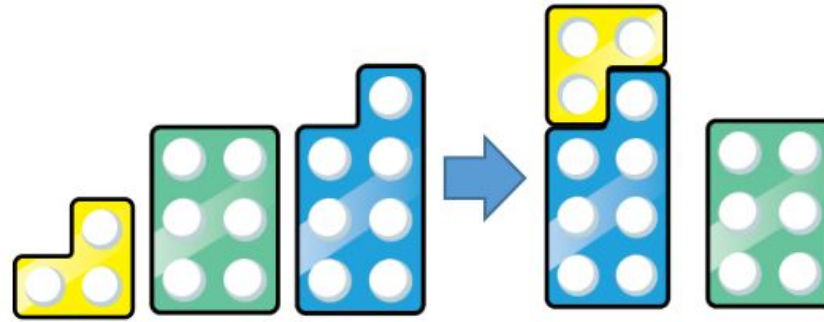
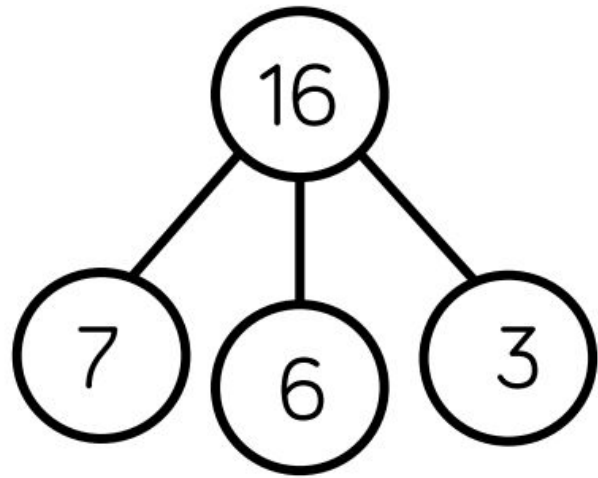
When adding single digits to a two-digit number, children should be encouraged to count on from the larger number.

They should also apply their knowledge of number bonds to add more efficiently e.g. $8 + 5 = 13$ so $38 + 5 = 43$.

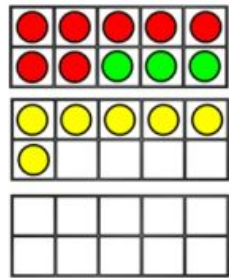
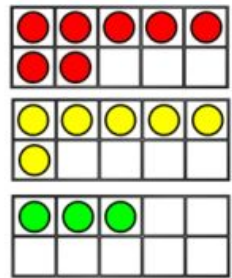
Hundred squares and straws can support children to find the number bond to 10.

Skill: Add three 1-digit numbers

Year: 2



$$7 + 6 + 3 = 16$$



$$7 + 6 + 3 = 16$$

10



16

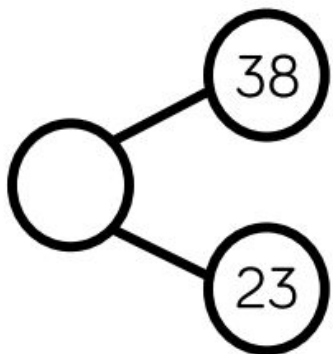
When adding three 1-digit numbers, children should be encouraged to look for number bonds to 10 or doubles to add the numbers more efficiently.

This supports children in their understanding of commutativity.

Manipulatives that highlight number bonds to 10 are effective when adding three 1-digit numbers.

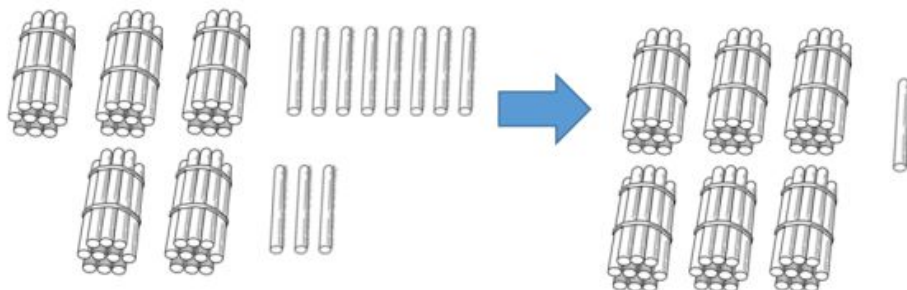
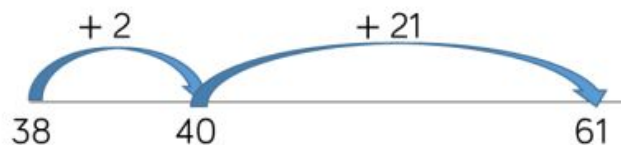
Skill: Add two 2-digit numbers to 100

Year: 2/3



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38	23
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$$38 + 23 = 61$$

Tens	Ones

$$\begin{array}{r} 38 \\ + 23 \\ \hline 61 \\ 1 \end{array}$$

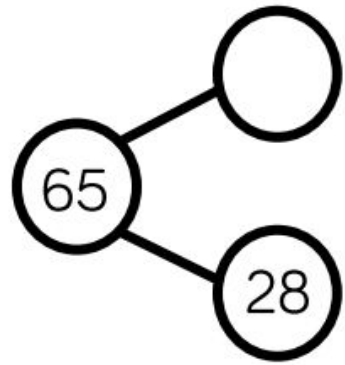
Tens	Ones
10 10 10	1 1 1 1
	1 1 1 1
10 10	1 1 1
10	

At this stage, encourage children to use the formal column method when calculating alongside straws, base 10 or place value counters. As numbers become larger, straws become less efficient.

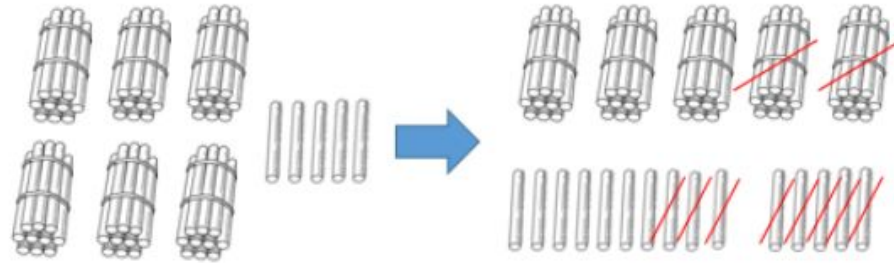
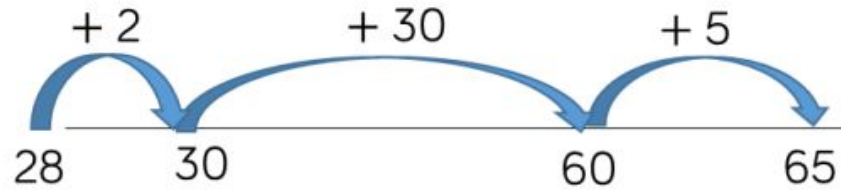
Children can also use a blank number line to count on to find the total. Encourage them to jump to multiples of 10 to become more efficient.

Skill: Subtract 1 and 2-digit numbers to 100

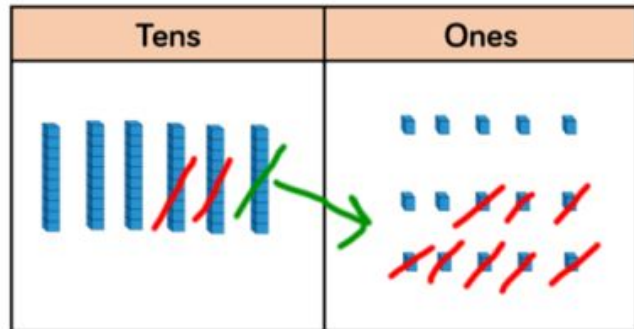
Year: 2



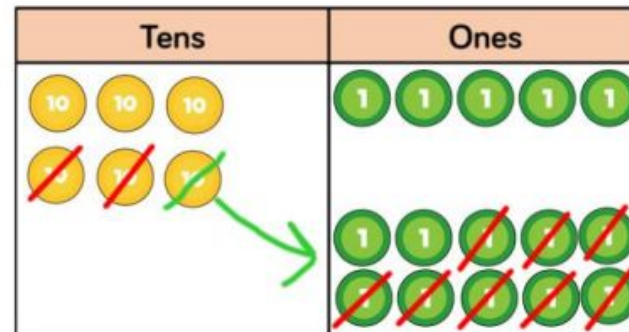
65



$$65 - 28 = 37$$



$$\begin{array}{r} 5 \ 1 \\ 65 \\ - 28 \\ \hline 37 \end{array}$$

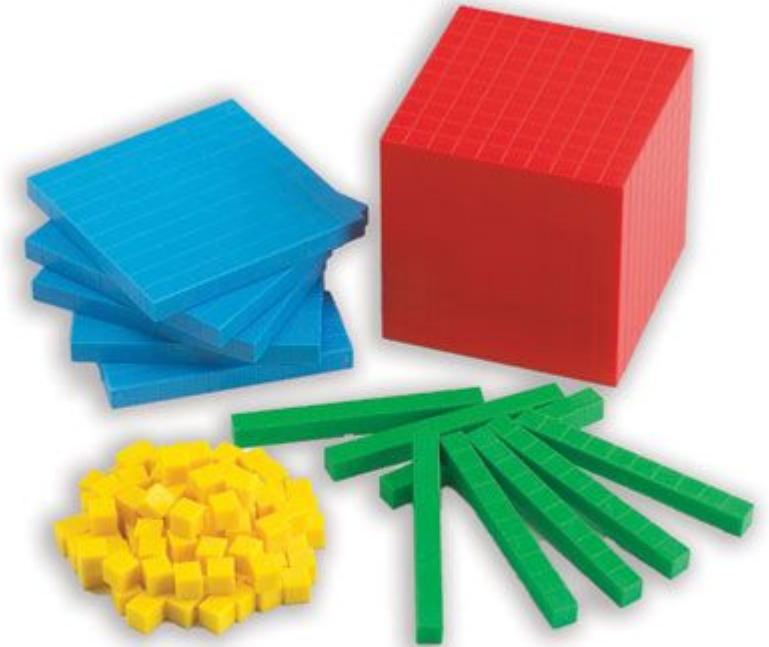
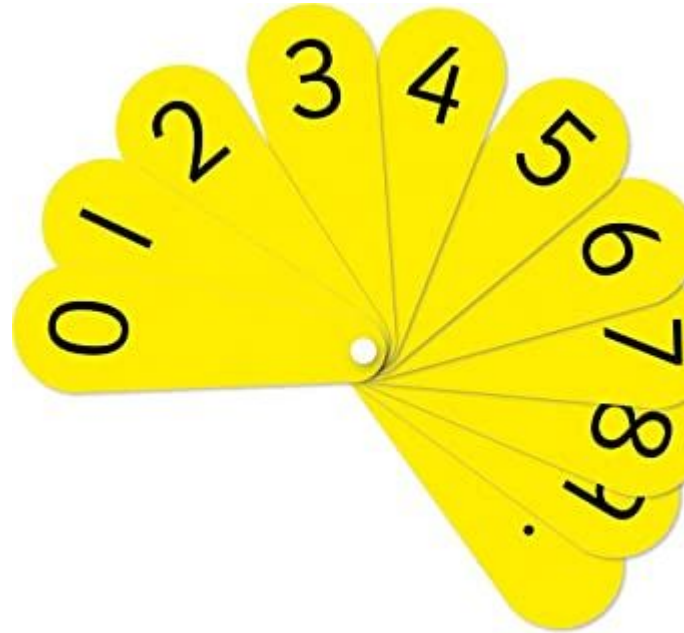


At this stage, encourage children to use the formal column method when calculating alongside straws, base 10 or place value counters. As numbers become larger, straws become less efficient.

Children can also use a blank number line to count on to find the difference. Encourage them to jump to multiples of 10 to become more efficient.

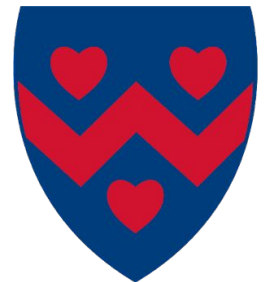
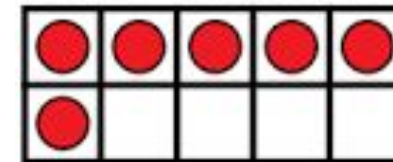
Equipment

- Number line
- Number square
- Dienes blocks
- Numicon
- Number fan
- Ten frame
- Counting beads
- Weighing scales
- Rulers
- Tape measures
- Beads
- Mini clocks
- Shapes



100 Square Grid

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



Websites and Apps

Websites

- TT Rockstars – website and app available
- Maths shed
- Hit the button
- Topmarks
- Speedboat Addition & Subtraction
- Nrich games
- BBC Maths games



Apps

- Squeebles (times tables)
- Math Bingo
- Numberblocks
- Monster Maths
- BeeBots

