

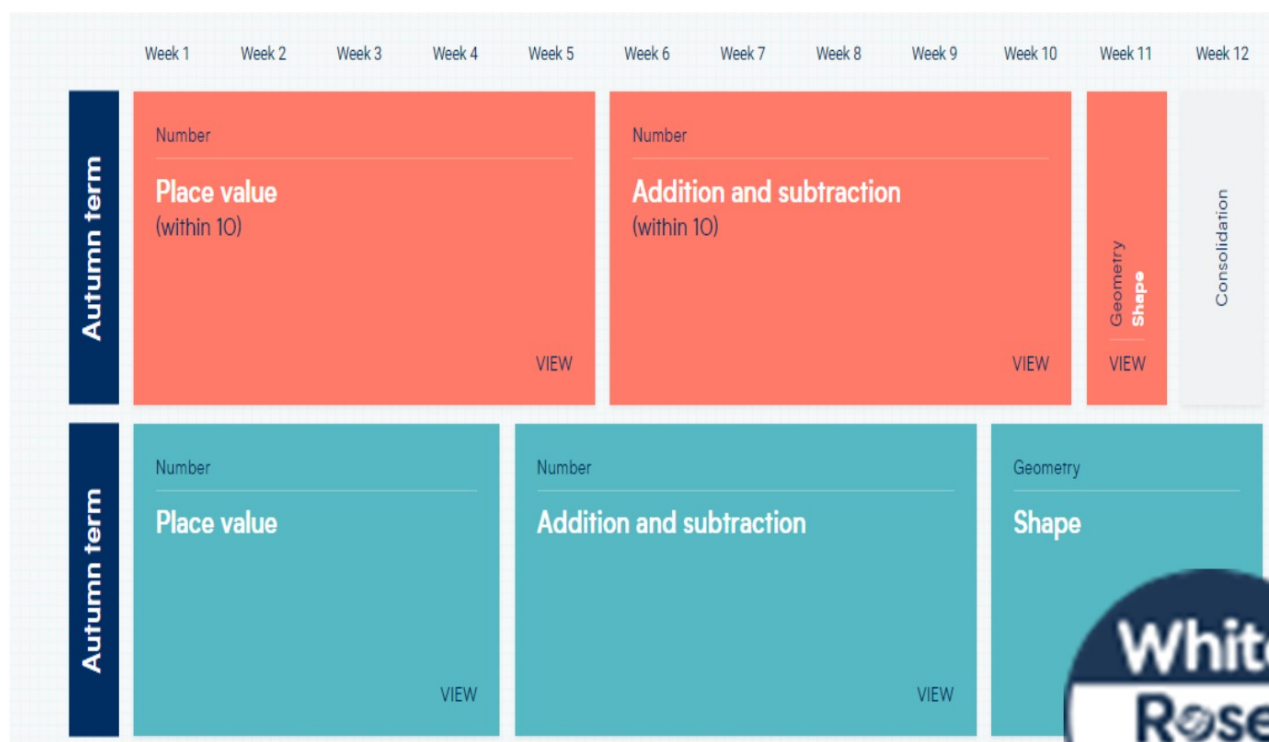
Year One/ Two
Maths Parent and Child
Workshop

for Mrs Johnson/ Mrs
Benson's Maths Group
25th January 2024

The aims of the session:

- Overview of the expected standards for Number within the mathematics curriculum.
- Teaching methods and strategies employed at school.
- Practical 'have a go' activities'.
- How you can support your children at home.
- Opportunities to ask and answer questions.

What has already been taught ...



Still to come ...

Spring term	<div>Number</div> <div>Place value (within 20)</div> <div>VIEW</div>	<div>Number</div> <div>Addition and subtraction (within 20)</div> <div>VIEW</div>	<div>Number</div> <div>Place value (within 50)</div> <div>VIEW</div>	<div>Measurement</div> <div>Length and height</div> <div>VIEW</div>	<div>Measurement</div> <div>Mass and volume</div> <div>VIEW</div>	
Spring term	<div>Measurement</div> <div>Money</div> <div>VIEW</div>	<div>Number</div> <div>Multiplication and division</div> <div>VIEW</div>	<div>Measurement</div> <div>Length and height</div> <div>VIEW</div>	<div>Measurement</div> <div>Mass, capacity and temperature</div> <div>VIEW</div>		
Summer term	<div>Number</div> <div>Multiplication and division</div> <div>VIEW</div>	<div>Number</div> <div>Fractions</div> <div>VIEW</div>	<div>Geometry</div> <div>Position and direction</div> <div>VIEW</div>	<div>Number</div> <div>Place value (within 100)</div> <div>VIEW</div>	<div>Measurement</div> <div>Time</div> <div>VIEW</div>	<div>Consolidation</div>
Summer term	<div>Number</div> <div>Fractions</div> <div>VIEW</div>	<div>Measurement</div> <div>Time</div> <div>VIEW</div>	<div>Statistics</div> <div>VIEW</div>	<div>Geometry</div> <div>Position and direction</div> <div>VIEW</div>	<div>Probability</div>	<div>White Rose Maths</div>

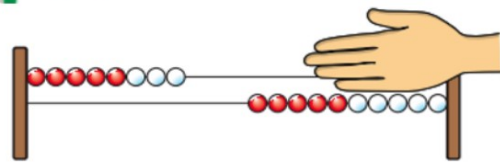
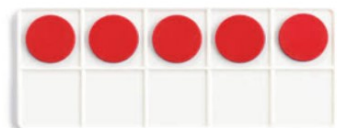


Name of child:			
Y1 Key Performance Indicator		Y2 Key Performance Indicator	
Date and year group in which KPI is achieved e.g. Y1 March 23		Date and year group in which KPI is achieved e.g. Y2 March 23	
Number and place value 1. Counts to and across 100, forwards and backwards, beginning with 0 or one, or from any given number		Number and place value Recognise the place value of each digit, tens and ones	
2.Counts, reads and writes numbers to 100 in numerals		Partition any 2 digit number into combinations of tens and ones (explaining their thinking)	
3.Counts in multiples of twos, fives and tens		Addition and subtraction Add and subtract two digit numbers and tens, where no regrouping is required	
4.Given a number, identifies one more and one less		Add and subtract any 2 digit numbers using an efficient method	
Addition and subtraction 5.Represents and uses number bonds and related subtraction facts within 20		Recall all number bonds to and within 10 and use these to reason with and calculate number bonds to and within 20.	
6.Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems		Multiplication and division Count in 2s, 5s and 10s and to solve simple problems	
Fractions (including decimals) 7. Recognises, finds, and names a half as one of two equal parts, and a quarter as one of four equal parts of an object, shape or quantity.		Recalls multiplication and division facts for 2, 5 and 10 and to solve simple problems	
Measurement 8.Compares, describes and solves practical problems for: lengths and heights eg. long/short, longer/shorter, tall/short, double/half;		Read scales in divisions of 1s, 2s, 5s and 10s	
9. mass/weight eg. heavy/light, heavier than, lighter than;		Fractions Identify a quarter, third, half and two quarters and three quarters of a number or shape and know that all parts must be equal parts of the whole	
10. capacity and volume eg. full/empty, more than, less than, half, half full, quarter		Measures Use different coins to make the same amounts	
11.Recognise and know the value of different denominations of coins and notes		Read the time on a clock to the nearest 15 minutes	
Properties of shape 12.Recognises and names common 2-D and 3-D shapes, including: - 2-D shapes eg. rectangles (including squares), circles and triangles;		Properties of shape Name some common 2D and 3D shapes from a group of shapes and describe some of their properties	
13. 3-D shapes eg. cuboids (including cubes), pyramids and spheres.		Name and describe properties of 2D and 3D shapes, including number of sides, vertices, edges, faces and lines of symmetry	



Concrete Apparatus

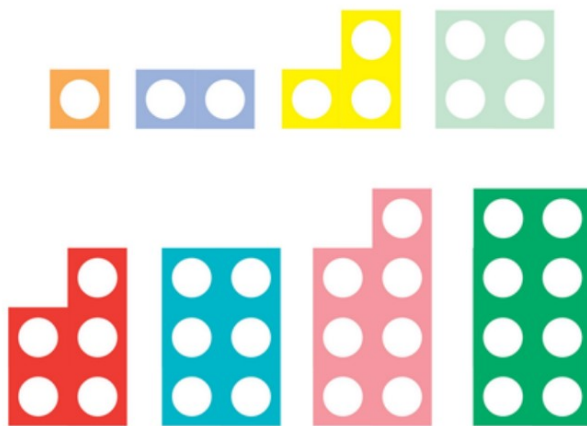
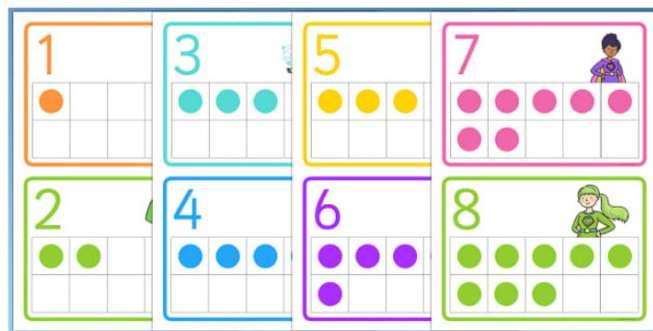
- Base 10
- Place Value Counters
- Tens Frames
- Hundred squares
- Number lines and number tracks
- Numicon
- Bead strings
- Rekenrek

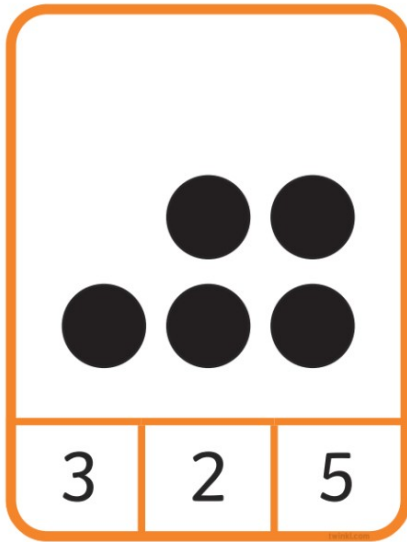


100 Square									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

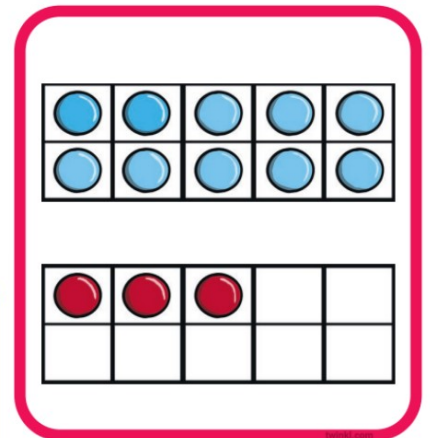
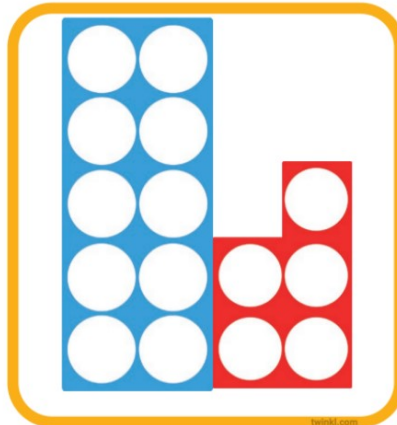
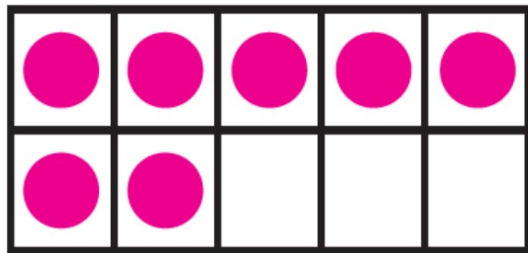
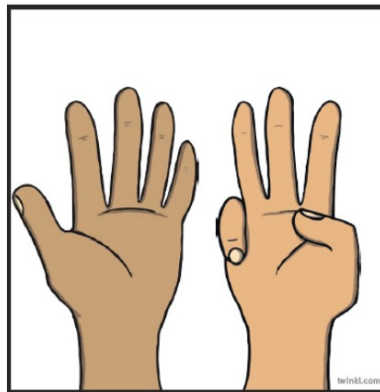
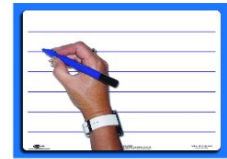
Let's use the apparatus to ...

Subitising is when you are able to look at a group of objects and realise how many there are without counting.

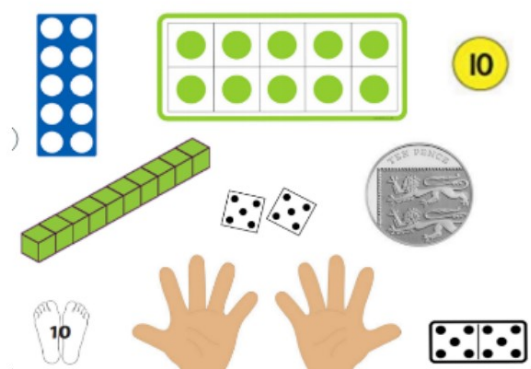




What numbers can you see?
Tell your adult.



Once a child has grasped a mathematical concept, it is important that they are exposed to **varied fluency** activities which develop their understanding.



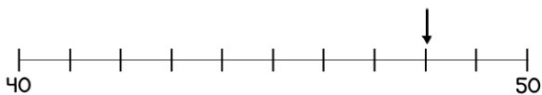
Number	Tens and Ones	Ten Frame	Base 10 xx	Words
26 ✓	2 tens 6 ones ✓			Twenty-six ✓
	___ tens ___ ones			Thirty ✓
	___ tens ___ ones			

Number and Place value

Year 1

Count forwards and backwards in 1s.

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




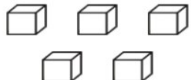
What number is the arrow pointing to?

24 is 1 less than

Number and place value

1. Counts to and across 100, forwards and backwards, beginning with 0 or one, or from any given number
2. Counts, reads and writes numbers to 100 in numerals
3. Counts in multiples of twos, fives and tens
4. Given a number, identifies one more and one less

Year 2

	
tens	ones

Look at these numbers.

19

74

5

Write each number once to make these correct.

<input type="text"/>	>	<input type="text"/>
<input type="text"/>	>	<input type="text"/>

Number and place value

Recognise the place value of each digit, tens and ones

Partition any 2 digit number into combinations of tens and ones (explaining their thinking)

Addition and Subtraction

Year 2

Expected Standards

- Add and subtract two digit numbers and tens, where no regrouping is required
- Add and subtract any 2 digit numbers using an efficient method
- Recall all number bonds to and within 10 and use these to reason with and calculate number bonds to and within 20.

Year 1

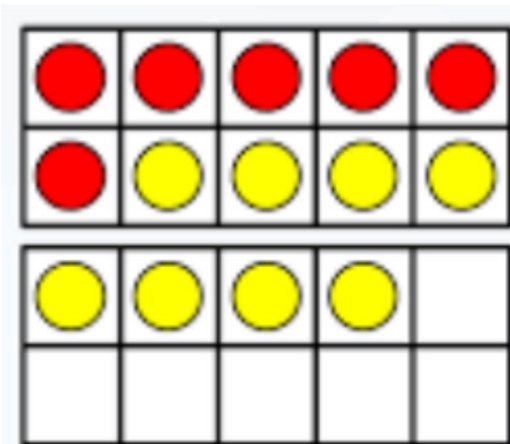
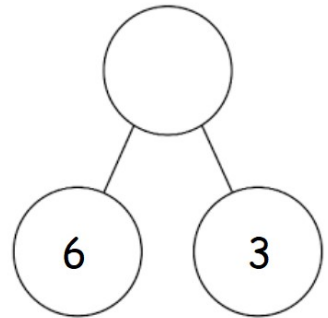
Expected standards

- Represents and uses number bonds and related subtraction facts within 20
- Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems.

Addition and subtraction - Year 1



$$6 + 3 = \underline{\quad}$$

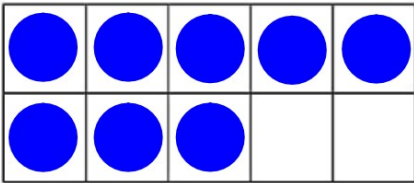


8					6				

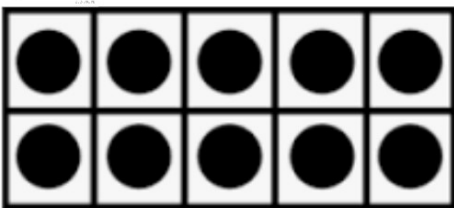
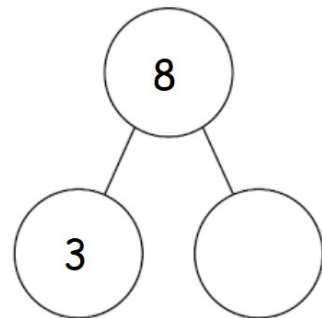
$$\underline{\quad} = 6 + 8$$

crossing the ten

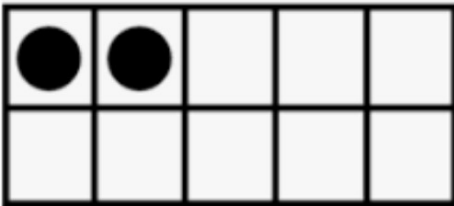
Addition and subtraction - Year 1



$$8 - 3 = \underline{\quad}$$



12	
	5

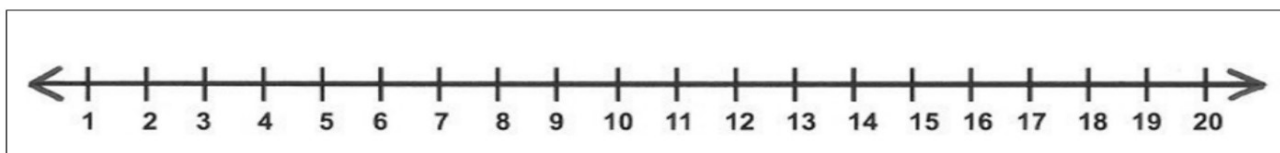


$$12 - 5 = \underline{\quad}$$

Other Methods for Addition and Subtraction Within 20

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

 $13 + 5 = \underline{\quad}$



14 \rightarrow 15, 16, 17



$$\underline{\quad} = 3 + 14$$



14 \rightarrow 13, 12, 11



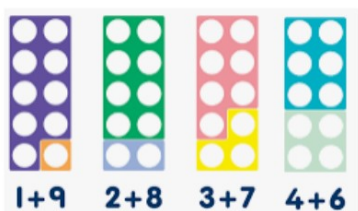
$$14 - 3 = \underline{\quad}$$

Addition and Subtraction: the ultimate aim ...



... mental and rapid recall of all bonds to and of ten

$0+6=$
$6+0=$
$1+5=$
$5+1=$
$2+4=$



$10+0$	
$9+1$	
$8+2$	
$7+3$	

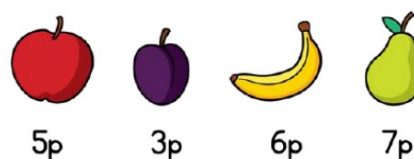
BINGO



$\begin{array}{c} 9 \\ 0 \end{array}$	$\begin{array}{c} 9 \\ 1 \end{array}$	$\begin{array}{c} 9 \\ 2 \end{array}$	$\begin{array}{c} 9 \\ 3 \end{array}$	$\begin{array}{c} 9 \\ 4 \end{array}$
9	8	7	6	5

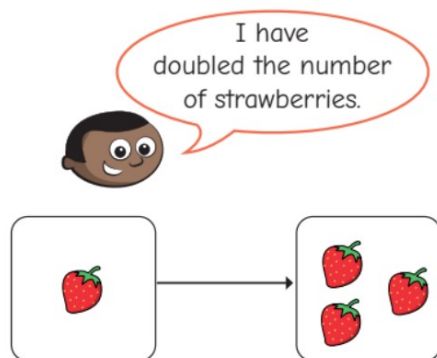
reasoning and applying
problem solving

Ted spends 10p.
Circle the 2 items he buys.



Addition and subtraction reasoning and problem solving

4

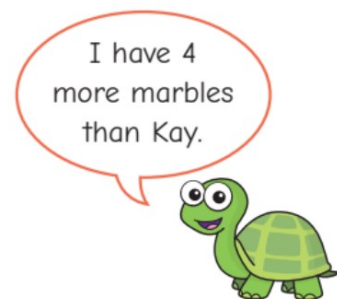


Do you agree with Mo?

Talk about it with a partner.

4

Tiny has 12 marbles.



How many marbles does Kay have?

3

Tiny is working out the missing number.

$$3 + \square = 11$$

The missing number is 14

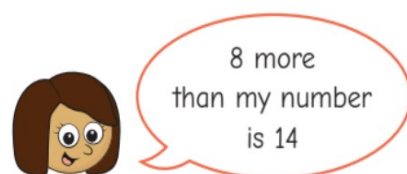


Do you agree with Tiny?

Explain your answer.

4

Kim is thinking of a number.

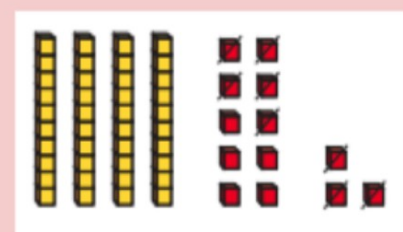
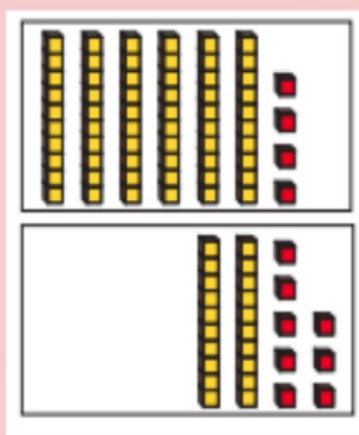


What number is Kim thinking of?

How do you know?

Partitioning Methods - see IWB display for modelling

- Using tens and ones (deines and counters)
- Drawing tens and ones
- Tens grids/part whole models
- Partitioning on a numberline
- Using number bond knowledge to the nearest 10



How could we use these methods to solve?

$$33 + 24 = \quad \quad 72 - 21 =$$

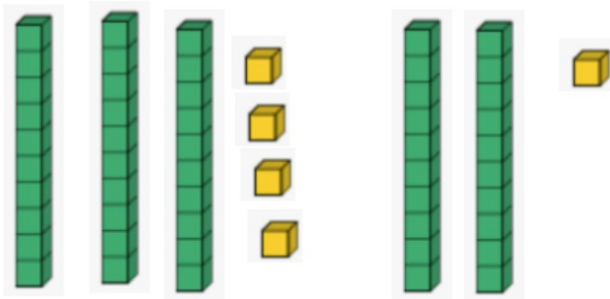
What about $32 - 13 = ?$

Mental Maths - fluency

- 1 more less/10 more less
- doubles/near doubles
- Numberbonds to 10 and 20
- Near 10s (eg $82 - 19 =$)

Let's have a go ...

$$34 + 21 =$$



How many altogether?

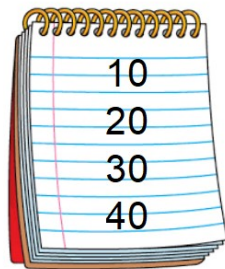
Multiplication and division

Year 1

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



Real life situations



Rote
counting

3.Counts in multiples of twos, fives and tens

Year 2

- 1 Write a fact from the 2 times-table to match each picture.

a)

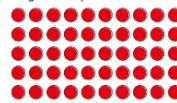


$$\square \times \square = \square$$

d) $2 \times \square = 4$

i) $14 = 2 \times \square$

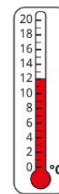
- 3 Use the array to complete the fact family.



$$\begin{array}{l} \square \times \square = \square \\ \square \times \square = \square \\ \square \div \square = \square \\ \square \div \square = \square \end{array}$$

- 1 Write the temperature shown on each thermometer.

a)



$\square^{\circ}\text{C}$

b)



$\square^{\circ}\text{C}$

Multiplication and division

Count in 2s, 5s and 10s and to solve simple problems

Recalls multiplication and division facts for 2, 5 and 10 and to solve simple problems

Read scales in divisions of 1s, 2s, 5s and 10s

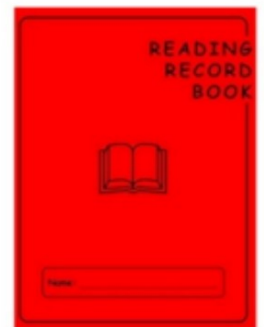
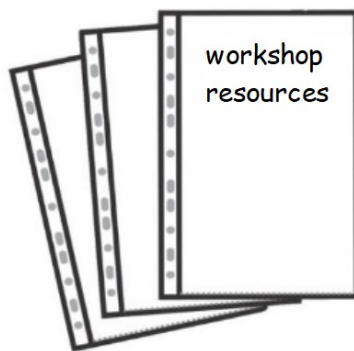


<https://play.numbots.com/#/intro>

YEAR 1 - The key things ...

- **counting** forwards and backwards to and from 100 with a focus on crossing the tens boundaries
- **learning all number facts** for the numbers up to and including 10
- **applying** knowledge of number bonds to 10, **to 20**.

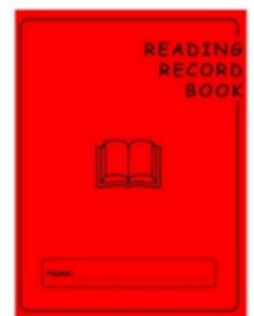
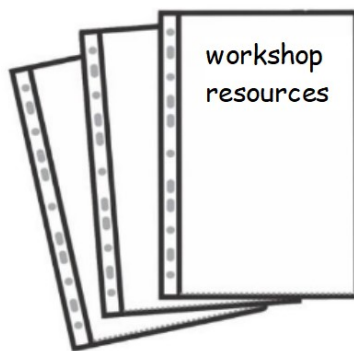
Useful resources ...



Year 2 - The key things ...

- recognising the place value and digit of **ones and tens**
- **adding and subtracting** 2 digit numbers from 2 digit numbers
- applying knowledge of **number bonds to 20**
- recalling multiplication and division facts for **2s, 5s and 10s.**

Useful resources ...



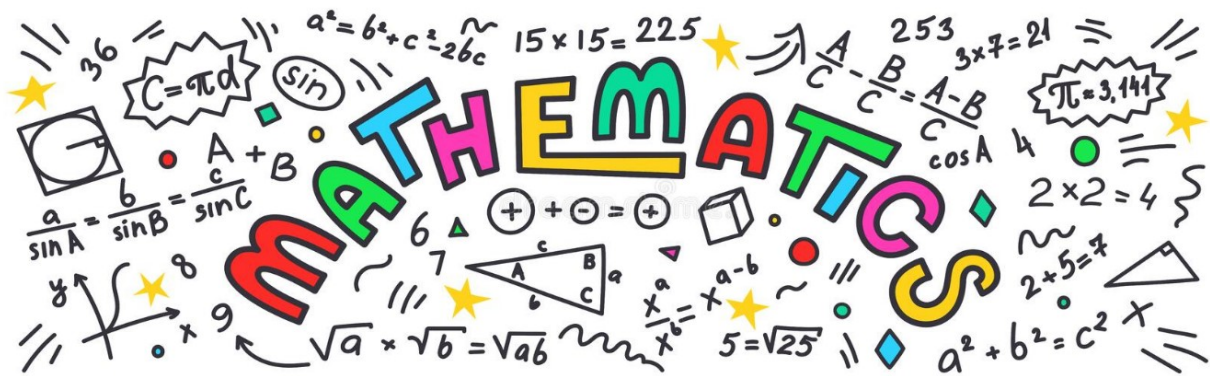
And finally...



We're often asked what's the one thing that will help to support my child in maths at school. So here it is....

Be positive.

We can ALL do maths!



Year 1

Year 2