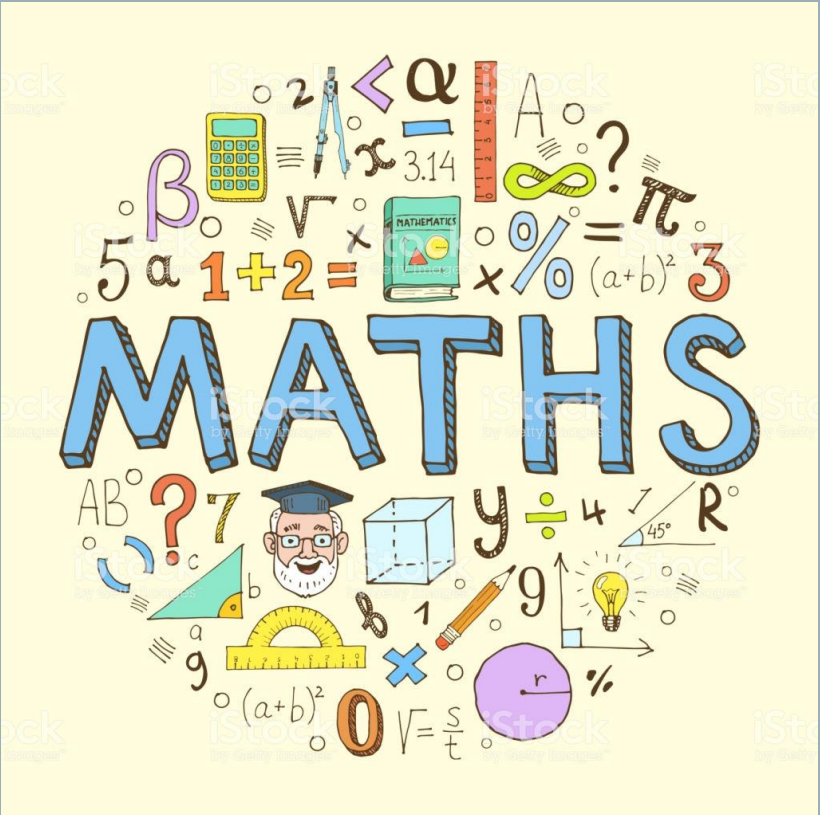
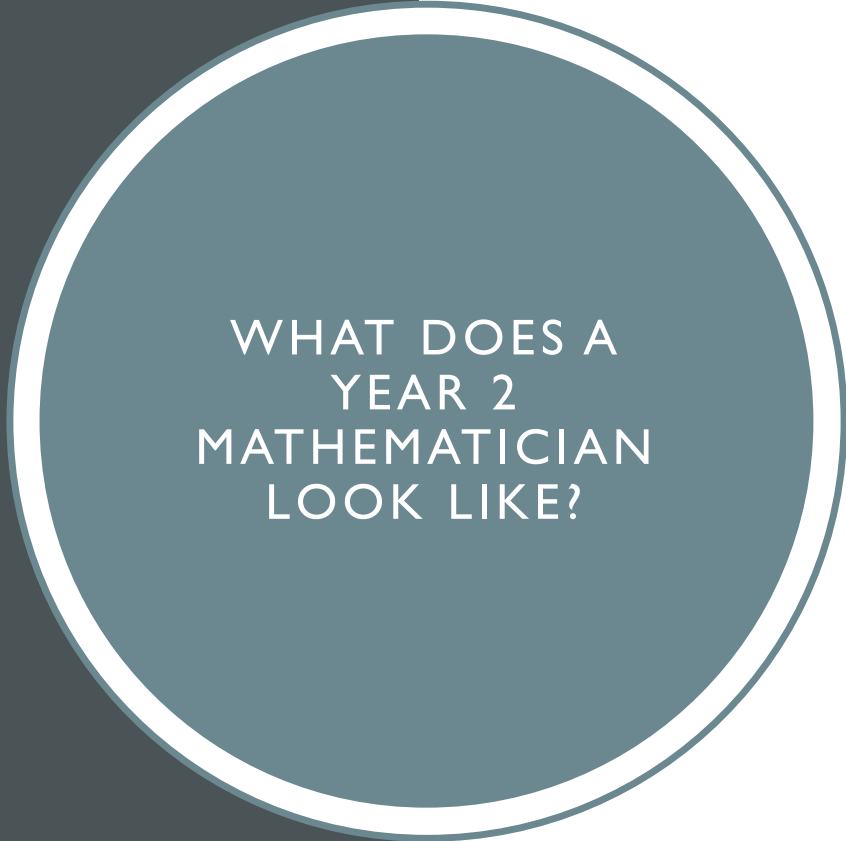


# MATHS IN YEAR 2



Miss Keane





WHAT DOES A  
YEAR 2  
MATHEMATICIAN  
LOOK LIKE?

- We use key objectives from the National Curriculum to give a basis on what children in Year 2 have achieved within their Maths lessons.
- These are organised into 7 different areas, linked to the Year 2 curriculum.

# WHAT DOES A YEAR 2 MATHEMATICIAN LOOK LIKE?

## Number - Number and Place Value

Count in steps of 2, 3, and 5 from 0, and in tens from any number

Recognise the place value of each digit in a two-digit number

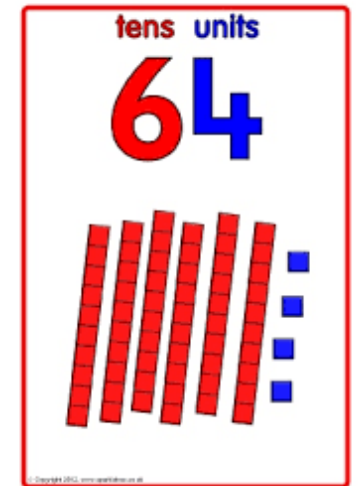
Identify, represent and estimate numbers using different representations, including the number line

Compare and order numbers from 0 up to 100

Read and write numbers to at least 100 in numerals and in words

Use place value and number facts to solve problems.

	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
x	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 DOES A YEAR 2 MATHEMATICIAN LOOK LIKE?

## Number - Addition and Subtraction

Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods

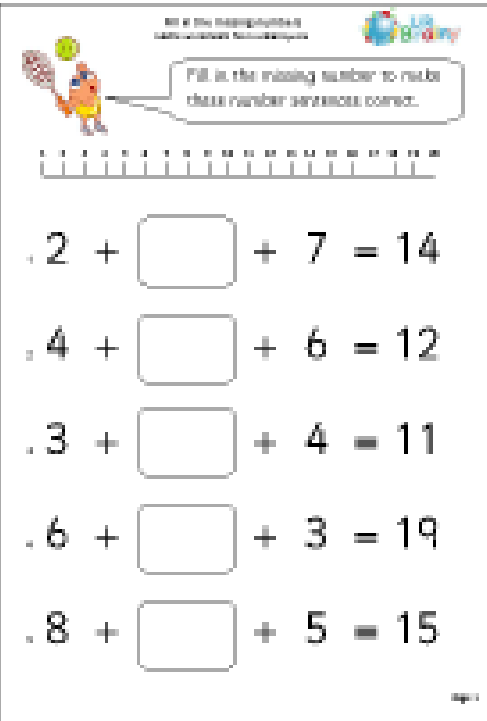
Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers

Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Solve problems with addition and subtraction applying their increasing knowledge of mental and written methods



Fill in the missing number to make these number sentences correct.

2 +  + 7 = 14

4 +  + 6 = 12

3 +  + 4 = 11

6 +  + 3 = 19

8 +  + 5 = 15

# WHAT DOES A YEAR 2 MATHEMATICIAN LOOK LIKE?

## Number - Multiplication and Division

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs

Show that multiplication of two numbers can be done in any order and division of one number by another cannot

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

**YEAR 2**  
**Multiplication & Division**  
• Odd and even numbers  
• Divide by 2  
• Divide by 10

Which numbers are odd?  
Which numbers are even?

15 1 60 19 22  
40 29 50 9 5  
58 25 3 10 7

15 apples are shared between 3 horses.

How many 10s in 70?  
 $10 + 10 + 10 + 10 + 10 = 50$   
 $70 \div 10 = 7$

Use the multiplication calculation to create a division calculation.  
 $3 \times 10 = 30$   
 $30 \div 10 = 3$   
 $9 \times 10 = 90$   
 $90 \div 10 = 9$

How many multiplication and division calculations can you make?  
4 10 40  
Set your calculations:  
 $10 \div 2 = 5$   $4 \times 10 = 40$   
 $40 \div 4 = 10$   $10 \times 4 = 40$

Zoe says,  
"I am thinking of an odd number between 16 and 28."  
What could Zoe's number be?  
17, 19, 21, 23, 25, 27

**Presentation for the week** (Fluency, reasoning, problem solving)

# WHAT DOES A YEAR 2 MATHEMATICIAN LOOK LIKE?

## Number - Fractions

Recognise, find, name and write fractions  $1/3$ ,  $1/4$ ,  $2/4$ , and  $3/4$  of a length, shape, set of objects or quantity

Write simple fractions and recognise the equivalence of  $2/4$  and  $1/2$

Teaching slides- fractions

Year 2

www.masterthemathsonline.co.uk

Look at the images. What does this equal part? What does this equal part? How do you know?

Complete the table

Fraction	Diagram	Quantity
$1/4$		
$1/2$		
$3/4$		

Tyler has 20 cubes. He brings half of them to school. How many does he have?

Look at the 8 cookies in 4 equal groups. Complete the calculations.

What portion does  $1/4$  of?



# WHAT DOES A YEAR 2 MATHEMATICIAN LOOK LIKE?

## Measurement

Choose and use appropriate standard units to estimate and measure length/height in any direction; mass; temperature; capacity to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels

Compare and order lengths, mass, volume/capacity and record the results using  $>$ ,  $<$  and  $=$

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value

Find different combinations of coins that equal the same amounts of money

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

Compare and sequence intervals of time

Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times

Know the number of minutes in an hour and the number of hours in a day

Year 2 | Summer Term | Teaching Guidance

Week 8 to 10 - Mass, Capacity & Temperature

### Measure Mass (g)

#### Notes and Guidance

In Year 1 children have experienced measuring mass using non-standard units. In Year 2, they will use gram weights and balance scales before moving on to use standard scales. Children will apply their counting on to 2s, 5s and 10s skills to measure mass in grams. Give children the opportunity to feel the mass of gram weights, so they can use this to estimate.




#### Mathematical Talk

What does the balance scale being level tell us?  
What symbol could we use? (=)

How much heavier is this object? How could you work it out?

If I add 100 g to the scale, what would the new mass be?

#### Varied Fluency

- Using gram weights in multiples of 5 to measure the mass of objects using a balance scale.  
The  weighs  grams.  

- Use the scales to record the mass of objects in grams.  

- Order the items from heaviest to lightest.  




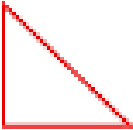

# WHAT DOES A YEAR 2 MATHEMATICIAN LOOK LIKE?

10 minutes. Identify and describe the shapes (120 items)

Describe the shapes.  
Cross the box if symmetry (if there is one)

Flaming and precision

1

	Name _____ Sides _____ Vertex/corners: _____ Line of symmetry? _____
	Name _____ Sides _____ Vertex/corners: _____ Line of symmetry? _____
	Name _____ Sides _____ Vertex/corners: _____ Line of symmetry? _____
	Name _____ Sides _____ Vertex/corners: _____ Line of symmetry? _____

www.twinkl.co.uk

## Geometry - Properties of Shape

Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line

Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces

Identify 2D shapes on the surface of 3D shapes

Compare and sort common 2D and 3D shapes and everyday objects.

## Geometry - Position and Direction

Order and arrange combinations of mathematical objects in patterns and sequences

Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)



WHAT DOES A  
YEAR 2  
MATHEMATICIAN  
LOOK LIKE?

Statistics

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables

Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

Ask and answer questions about totalling and comparing categorical data.

EACH LESSON, CHILDREN HAVE A **LEARNING OBJECTIVE** WHICH SHOWS THE AIM OF THE LESSON.

**Date: 23.09.19**

**LO: To recognise the place value of each digit in a two-digit number.**

**I**

**I can understand what place value is.**

**AS**

**I can recognise the place value of each digit in a two-digit number.**

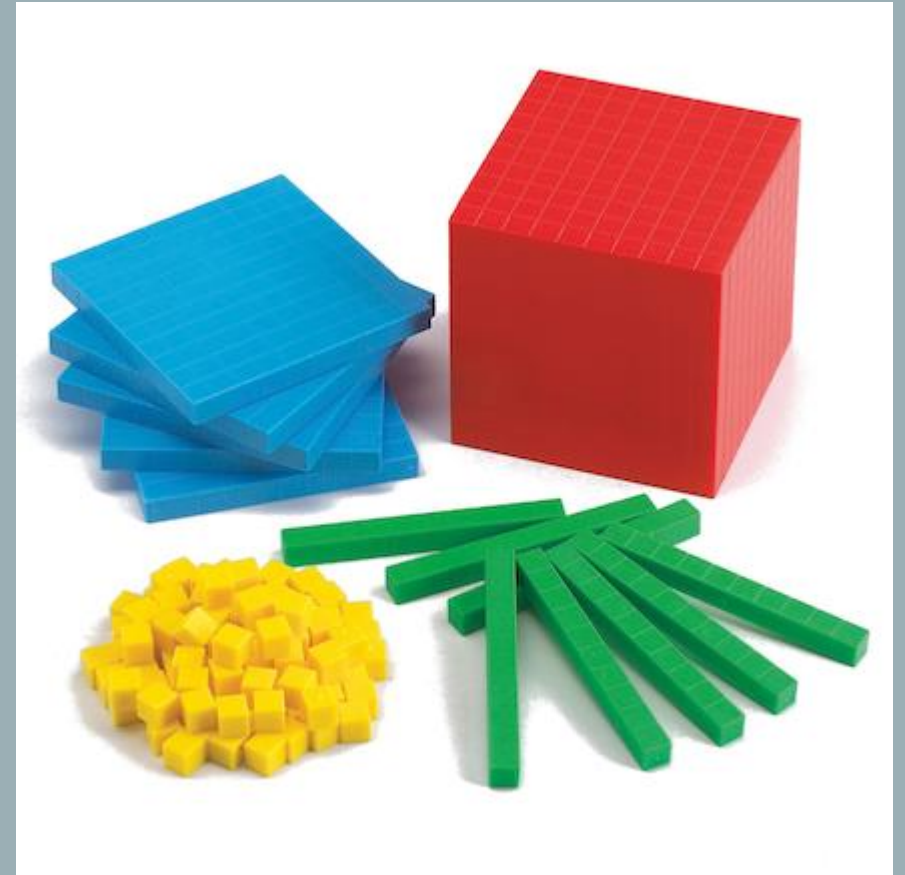
**VF**

**I can exchange ones and tens**

**PW**

L.O. TO RECOGNISE THE PLACE VALUE OF EACH DIGIT IN A TWO DIGIT NUMBER (ONES, TENS)

WE START YEAR 2 BY FOCUSING ON PLACE VALUE AS IT IS A CRUCIAL FOUNDATION FOR MATHEMATICAL UNDERSTANDING!

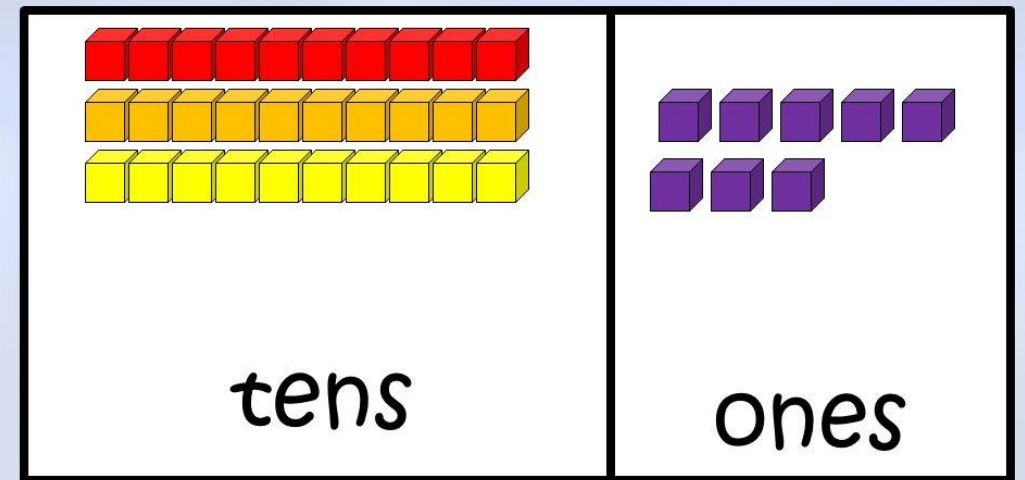


L.O. TO RECOGNISE THE PLACE VALUE OF EACH DIGIT IN A THREE DIGIT NUMBER (ONES, TENS)

WE USE BASE 10 EQUIPMENT AS A CONCRETE MANIPULATIVE TO HELP CHILDREN UNDERSTAND WHAT PLACE VALUE MEANS.

THIS ALSO HELPS CHILDREN TO UNDERSTAND **EXCHANGING...**

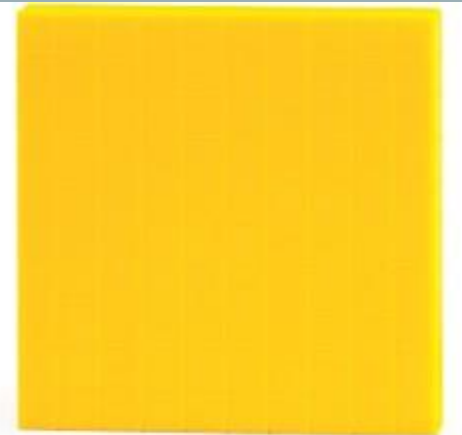
$$\begin{array}{r} \underline{3} \text{ tens} + \underline{8} \text{ ones} = \\ \underline{\quad 38} \end{array}$$



L.O. TO RECOGNISE THE PLACE VALUE OF EACH DIGIT IN A TWO DIGIT NUMBER (ONES AND TENS)

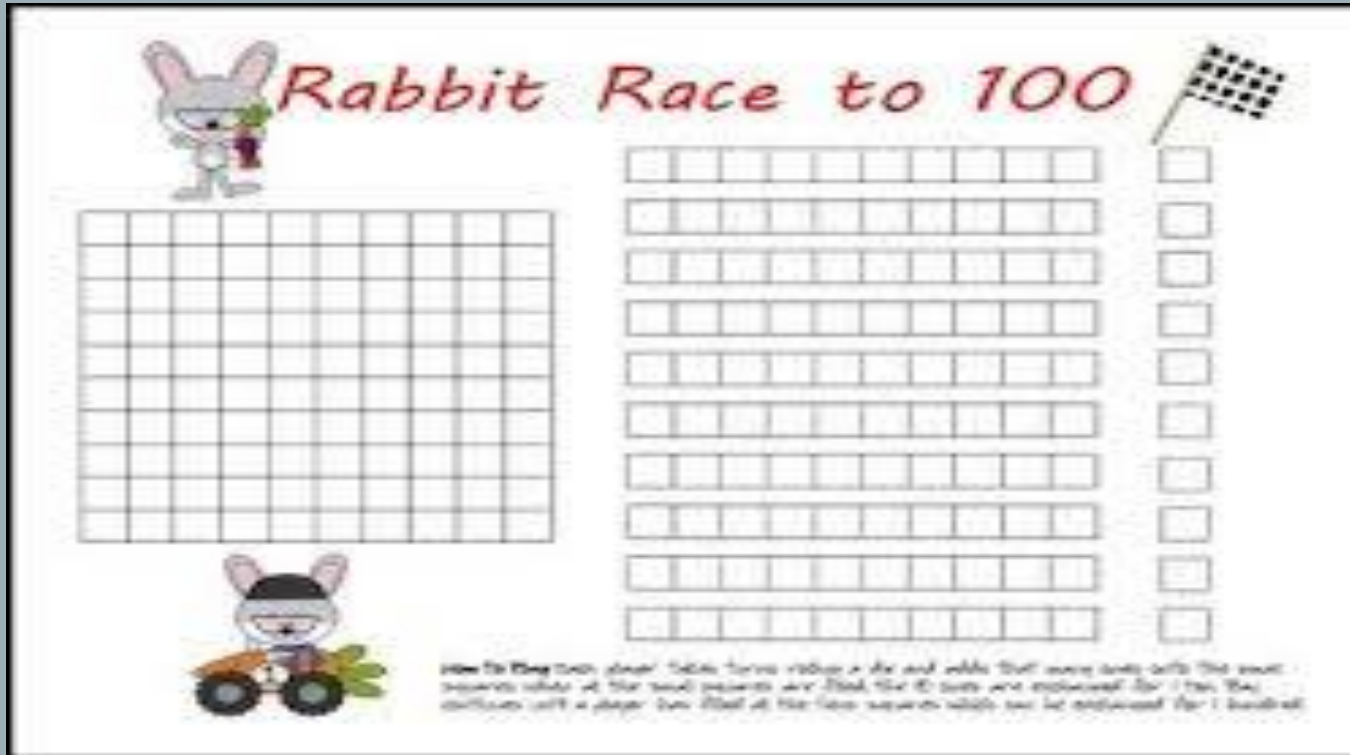


10 ones make 1 ten



10 tens make 1 hundred

# L.O. TO RECOGNISE THE PLACE VALUE OF EACH DIGIT IN A TWO DIGIT NUMBER (ONES AND TENS)

A worksheet titled "Rabbit Race to 100" featuring a cartoon rabbit at the top left and a checkered flag at the top right. The page contains a large 10x10 grid on the left, a 10x10 grid of boxes in the center, and a vertical column of 10 boxes on the right. At the bottom left is a cartoon rabbit on a tricycle. At the bottom center, there is a small paragraph of text: "How to play: Each player starts with a die and adds that many units to the next square on the board. If the total is 10, they exchange 10 units for 1 ten. They continue until a player has filled all the ten squares which can be exchanged for 1 hundred."

**USE THE KEY  
VOCABULARY TO  
EXPLAIN WHAT IS  
HAPPENING:  
ONES  
TENS  
EXCHANGE**

**KEEP PLAYING TILL  
YOU REACH 100!**





THANKYOU FOR COMING!