MATHS		Year 2 Objectives
Autumn	**Spring**	**Summer**

<u>**Autumn 1**</u> -30 days plus 5 problem solving days
<u>Addition and subtraction</u> -3 days
 - Recall and uses addition and subtraction facts to 20 and 100
    -Fluently up to 20
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T
<u>Number and place value</u> -3 days
 -Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward (KPI)
 -Recognise the place value of each digit in a two-digit number (tens, ones)
 -Read and write numbers to at least 100 in numerals and in words
<u>Geometry</u> -1 day
 -Identify and handle 3-D shapes –read and write names for shapes.
<u>Addition and subtraction</u> -4/5 days
 -Recall and uses addition and subtraction facts to 20 and 100
    -Fluently up to 20(KPI)
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T
 -Solve problems with addition and subtraction : using concrete objects and pictorial representations, including those involving numbers, quantities and measures (KPI)
<u>Number and place value</u> -3 days
 -Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward (KPI)
 -doubling and halving
 -Recognise the place value of each digit in a two-digit number (tens, ones)
 -Read and write numbers to at least 100 in numerals and in words
 -Compare and order numbers from 0 up to 100 (KPI)
<u>Measurement</u> -4 days
 -counting and recognising coins
	<u>**Spring 1**</u> -25 days plus 5 problem solving days
	<u>Multiplication</u> -2/3 days
	-Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
	<u>Measurement</u> -3/4 days
	 -recognise and use symbols for pounds and pence; 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 (KPI)
	<u>Number and place value</u> -4 days
	 -Recognise the place value of each digit in a two-digit number (tens, ones)
	 -identify, represent and estimate numbers using different representations, including the number line.
	 -use place value and number facts to solve problems
	<u>Addition and subtraction</u> -4 days
	 -Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T, TO+TU and O+O+O
	 -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
	<u>Measurement</u> -4 days
	 -Choose and use appropriate standard units to estimate and measure mass to nearest unit using scales.
		<u>**Summer 1**</u> -30 days plus 5 problem solving days
		<u>Mental starters over next 2 weeks</u> –addition and subtraction facts to 20, on to 100
		    -multiplication and division facts
		<u>Statistics</u> 3 days
		-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 data
		    -include the value of 1 (block or item shown) representing ratio of 2,5,or 10
		<u>Geometry</u> -4 days
		 -Identify and describe the properties of 3d shapes, including the number of edges, vertices and faces.
		    -identify 2-D shapes on the surface of 3d
		 -Compare and sort common 3d shapes and everyday objects (KPI)
		 -use mathematical vocab. to describe position, direction and movement, including movement in a straight line and distinguishing amounts of turn -1/4, ½, ¾ turns –clockwise and anti-clockwise.
		<u>Number and place value</u>-3 days
		-identify, represent and estimate numbers using different representations, including the number line
		   -include temperature scales
		-Compare and order numbers from 0 up to 100: use < , > and = signs (KPI)
		 -use place value and number facts to solve problems
		    -understand zero as a place holder
		<u>Addition and subtraction</u> -5 days
		 -Recall and uses addition and subtraction facts to 20 and 100
		-Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T, TO+TO and O+O+O
		    -include terms sum and difference

-find different combinations of coins that equal the same amounts of money
-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

Addition and subtraction -4/5 days
-Recall and uses addition and subtraction facts to 20 and 100
   -Fluently up to 20(KPI)
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T, TU+TU, O+O+O
-Solve problems with addition and subtraction : using concrete objects and pictorial representations, including those involving numbers, quantities and measures (KPI)

Autumn 2 -30 days plus 5 problem solving day
Number and place value -5 days
  -Recognise the place value of each digit in a two-digit number (tens, ones)
 -Read and write numbers to at least 100 in numerals and in words
 -Identify, represent and estimate numbers using different representations, including the number line
    -also include rounding
-Compare and order numbers from 0 up to 100 (KPI)
    -use <, > and = signs
-use place value and number facts to solve problems
Addition and subtraction -5 days
 -Recall and uses addition and subtraction facts to 20 and 100
    -Fluently up to 20(KPI)
-show that addition of 2 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

-Compare and order mass and record the results using <,> and =
 -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
Multiplication and division -4 days
 -Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals (=) signs
   - Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods and multiplication and division facts including problems in context (KPI)

3 days left here

Spring 2 -25 days plus 5 problem solving days
Number and place value-3 days
-Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward (KPI)
-Read and write numbers to at least 100 in numerals and in words
-Compare and order numbers from 0 up to 100: use < , > and = signs (KPI)
Geometry -2 days
-Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
Statistics 2/3 days
-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
Multiplication and division -4 days
-Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (KPI)

-Solve problems with addition and subtraction : using concrete objects and pictorial representations, including those involving numbers, quantities and measures (KPI)
   -also applying their increasing knowledge of mental and written methods
 -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 (KPI)
Multiplication -2/3 days
-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 ($\times$), division ($\div$) and equals (=) signs
Measurement -3 days
 -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
Multiplication -2/3 days
 -Show that multiplication of two numbers can be done in any order (commutative) 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 context
Fractions -3 days
 -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 for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Summer 2 -30 days plus 5 problem solving days
Geometry -3 days
 -Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
   -draw lines and shapes using a straight edge

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

Geometry -2/3 days
 -Identify and describe the properties of 3d shapes, including the number of edges, vertices and faces.
 -Compare and sort common 3d shapes and everyday objects (KPI)

Multiplication and division -3 days
-Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (KPI)
 -Calculate mathematical statements for multiplication and division (repeat addition)
-doubling and halving

Measurement -4 days
-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
 -Choose and use appropriate standard units to estimate and measure length, using rulers
 -compare and order lengths using < and > and =

Geometry -3 days
 -Identify and handle 2-D shapes –read and write names for shapes.
-Identify and describe the properties of 2d shapes, including the number of edges, vertices and faces.
 -Compare and sort common 2d shapes and everyday objects (KPI) –Venn diagrams

Fractions -2/3 days
 -Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a shape and a set of objects.

Statistics -2 days
 -Interpret and construct simple tally charts, block diagrams and simple tables
3 days left here.

- Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods and multiplication and division facts including problems in context (KPI)

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

Geometry -3 days
-Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
-Order and arrange combinations of mathematical objects in patterns and sequences

Measurement -2 days
-Choose and use appropriate standard units to estimate and measure capacity to nearest unit using measuring vessels.
 -Compare and order capacity and record the results using <,> and =

Addition and subtraction -5 days
 -Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T, TO+TU and O+O+O
     -include terms sum and difference
-Solve problems with addition and subtraction : using concrete objects and pictorial representations, including those involving numbers, quantities and measures (KPI)
     -also applying their increasing knowledge of mental and written methods

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-identify 2d shapes on the surface of 3d shapes.
 -compare and sort common 2d and 3d shapes and everyday objects

4 days used for SAT assessment

Addition and subtraction -4 days
-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 : using concrete objects and pictorial representations, including those involving numbers, quantities and measures (KPI)
    -also applying their increasing knowledge of mental and written methods

Multiplication -3 days
-Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
-Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods and multiplication and division facts including problems in context

Number -2/3 days
 -read and write numbers to at least 100 in numerals and in words
 -Compare and order numbers from 0 up to 100: use < , > and = signs (KPI)
 -use place value and number facts to solve problems
     -understand zero as a place holder

Fractions -3 days
 -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 for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2

Measurement -4/5 days
 -recognise and use symbols for pounds and pence; combine amounts to make a particular value.
 -find different combinations of coins that equal the same amounts of money
 -compare and order lengths, mass, volume/ capacity and record the results using <, > and =

5 days left