

MATHS	2020-2021	Year 3 objectives
Autumn	Spring	Summer
<p>Autumn 1 -30 days plus 5 problem solving days <u>Number and place value</u> – 2/3 days -count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number <small>[SEP]</small>-recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <small>[SEP]</small> -compare and order numbers up to 1000 <small>[SEP]</small> <i>-read and write numbers up to 1000 in numerals and in words</i> <small>[SEP]</small> <u>Measurement</u> -2 days Mental- adding and subtracting 10 and 100 from given numbers -estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight <small>[SEP]</small> <u>Addition and subtraction</u> -2 days –but also bring into other weeks in starter activities -add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds <small>[SEP]</small>(KPI) <u>Number and place value</u> -4 days Mental – doubling and halving -,x3,x5,x10 and division facts -count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number <small>[SEP]</small>(KPI) -recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <small>[SEP]</small> - identify, represent and estimate numbers using different representations <small>[SEP]</small> <u>Geometry –properties of shape</u>-2 days -draw 2-D shapes and describe their properties. -recognise angles as a property of shape or a description of a turn <small>[SEP]</small> <u>Measures</u> -4 days Mental – 3 and 4 times table and division facts</p>	<p>Spring 1 -25 days plus 5 problem solving days Mental –recap times tables and division facts as necessary across the term <u>Number and place value</u> -5 days -count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number (KPI) <small>[SEP]</small>-recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <small>[SEP]</small> -compare and order numbers up to 1000 <small>[SEP]</small> -read and write numbers up to 1000 in numerals and in words -solve number and practical problems <u>Measurement</u> -2 days -estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight <small>[SEP]</small> <u>Geometry –properties of shapes</u> -2/3 days -recognise angles as a property of shape or a description of a turn <small>[SEP]</small> -identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle <small>[SEP]</small>(KPI) -identify horizontal and vertical lines and pairs of perpendicular <small>[SEP]</small> <u>Addition and subtraction</u> -6 days -add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds <small>[SEP]</small> -add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction -estimate the answer to a calculation and use inverse operations to check answers <small>[SEP]</small> -solve problems, including missing number problems,</p>	<p>Summer 1 -30 days plus 5 problem solving days Mental –recap times tables and division facts as necessary across the term (KPI) <u>Multiplication and division</u> -6 days -write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods <small>[SEP]</small>(KPI) <i>-solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</i> <small>[SEP]</small>(KPI) <u>Number and place value</u> –3/4 days -identify, represent and estimate numbers using different representations <small>[SEP]</small> -read and write numbers up to 1000 in numerals and in words <small>[SEP]</small><i>-solve number problems and practical problems involving these ideas.</i> <small>[SEP]</small>(KPI) <u>Geometry –properties of shapes</u> -2/3 days Mental –count in multiples of a given number -identify horizontal and vertical lines and pairs of perpendicular and parallel lines -be able to draw and measure straight lines in centimetres and in a variety of contexts –also be able to round to whole centimetres. -draw 2d shapes and recap properties –include symmetrical and non-symmetrical <small>[SEP]</small> <small>[SEP]</small><u>Measurement</u> -3 days -measure the perimeter of simple 2d shapes. -measure, compare, add and subtract with volume and capacity (KPI) <u>Fractions</u> -4/5 days -recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators <small>[SEP]</small>-recognise and show, using diagrams, equivalent</p>

<p>-measure, compare, add and subtract: lengths (m/cm/mm); (KPI)</p> <p>-measure the perimeter of simple 2-D shapes (KPI)</p> <p><u>Number –place value -3 days</u></p> <p>-order and compare numbers up to 1000</p> <p>-solve number and practical problems</p> <p>Autumn 2- 30 days plus 5 problem solving days</p> <p><u>Fractions -1 week</u></p> <p>Mental -3 and 4 times table and division facts</p> <p>-count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 (KPI)</p> <p>-recognise, find and write fractions of a discrete set of objects: unit fractions and non- unit fractions with small denominators. (KPI)</p> <p>-recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p><u>Number –place value -1 week</u></p> <p>Mental –recap multiplication and division facts</p> <p>-read and write numbers up to 1000 in numerals and in words (KPI)</p> <p>-recognise the place value of each digit in a three-digit number (hundreds, tens, ones) (KPI)</p> <p>-order and compare numbers up to 1000</p> <p>-solve number problems and practical problems involving these ideas.</p> <p>-value of coins and amounts (KPI)</p> <p><u>Addition and subtraction -1 week</u></p> <p>Mental –addition and subtraction facts</p> <p>-add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction (may also be appropriate to do partitioning method first) (KPI)</p> <p>-solve money problems</p> <p>-coins for given values</p> <p>-totals and change (KPI)</p> <p><u>Fractions -6 days</u></p> <p><u>Mental</u></p> <p>-recognise, find and write fractions of a discrete set of</p>	<p>using number facts, place value, and more complex addition and subtraction. (KPI)</p> <p><u>Measurement -2/3 days</u></p> <p>Mental –recap telling the time</p> <p>-measure, compare, add and subtract with mass (KPI)</p> <p>-solve word problems with mass</p> <p><u>Multiplication –mental</u></p> <p>-recall and use multiplication and division facts for the 3, 4 and 8 (KPI)</p> <p><u>Fractions -3 days</u></p> <p>Mental –addition and subtraction facts</p> <p>-count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 (KPI)</p> <p>-also bring in measurements</p> <p>-recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>-solve problems that involve elements from fractions</p> <p><u>Addition and subtraction -2 days</u></p> <p>-estimate the answer to a calculation and use inverse operations to check answers (KPI)</p> <p>-solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. (KPI)</p> <p>Spring 2 -25 days plus 5 problem solving days</p> <p>Mental –recap times tables and division facts as necessary across the term</p> <p><u>Measurement -1 week</u></p> <p>Mental –names and properties of 2d and 3d shapes</p> <p>-tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks (KPI)</p> <p>-estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight (KPI)</p> <p>-know the number of seconds in a minute and the number of days in each month, year and leap year (KPI)</p> <p>-compare durations of events [for example to calculate the</p>	<p>fractions with small denominators (KPI)</p> <p>-compare and order unit fractions, and fractions with the same denominators (KPI)</p> <p>-solve problems that involve all of the above.</p> <p><u>Addition and subtraction -3/4 days</u></p> <p>-add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds (KPI)</p> <p>-subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p> <p>-solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. (KPI)</p> <p>Summer 2 -30 days plus 5 problem solving days (there are extra days here so you can add recap sessions)</p> <p>Mental –recap times tables and division facts as necessary across the term</p> <p><u>Statistics -2/3 days</u></p> <p>-present data using bar charts, pictograms and tables</p> <p>-emphasis on using keys and variety of scale</p> <p>-solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.</p> <p><u>Multiplication and division -4 days</u></p> <p>-write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (KPI)</p> <p>-solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. (KPI)</p> <p><u>Statistics -2 days</u></p> <p>-interpret Venn and Carroll diagrams</p> <p>-interpret data using bar charts, pictograms and tables - emphasis on using keys and variety of scale</p> <p>-solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using</p>
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<p>objects: unit fractions and non- unit fractions with small denominators ^[1]_{SEP}</p> <p>-recognise and show, using diagrams, equivalent fractions with small denominators (KPI)</p> <p>^[1]_{SEP}-add and subtract fractions with the same denominator within one whole</p> <p>-solve fraction problems</p> <p><u>Statistics</u> -3 days</p> <p>-interpret and present data using bar charts, pictograms and tables (KPI)</p>	<p>time taken by particular events or tasks]. ^[1]_{SEP}</p> <p><u>Fractions</u> -1 week</p> <p>-telling the time with Roman numeral clockface / recap number of seconds in a minute etc</p> <p>-add and subtract fractions with the same denominator within one whole</p> <p>-compare and order unit fractions, and fractions with the same denominators (KPI)</p> <p>-fraction number lines</p> <p>-solve problems that involve all of the above.</p> <p><u>Multiplication and division</u> -7 days</p> <p>-recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables ^[1]_{SEP}</p> <p>-write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods ^[1]_{SEP}</p> <p>-solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. ^[1]_{SEP}</p> <p><u>Statistics</u> -2 days</p> <p>-interpret and present data using bar charts, pictograms and tables (KPI)</p> <p>-solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.</p> <p><u>Number</u> -2 days</p> <p>-solve number and practical problems that involve all of the place value ideas</p> <p><u>Geometry –properties of shapes</u> -2 days</p> <p>-make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p>	<p>information presented in scaled bar charts and pictograms and tables.</p> <p><u>Addition and subtraction</u> -4/5 days</p> <p>-estimate the answer to a calculation and use inverse operations to check answers ^[1]_{SEP}</p> <p>-solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. (KPI)</p> <p>-add and subtract amounts of money to give change, using both £ and p in practical ^[1]_{SEP} contexts (from measurement section) ^[1]_{SEP}</p> <p><u>Fractions</u> ^[1]_{SEP}-4 days</p> <p>Mental –multiplying and dividing numbers by 10</p> <p>-recognise, find and write fractions of a discrete set of objects: unit fractions and non- unit fractions with small denominators ^[1]_{SEP}(KPI)</p> <p>-compare and order unit fractions, and fractions with the same denominators ^[1]_{SEP}</p> <p>-solve problems that involve all of the above.</p> <p><u>Measurement</u> –5 days</p> <p>-tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks (KPI) ^[1]_{SEP}</p> <p>-estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o’clock, a.m./p.m., morning, afternoon, noon and midnight ^[1]_{SEP}</p> <p>-know the number of seconds in a minute and the number of days in each month, year and leap year ^[1]_{SEP}</p> <p>-compare durations of events [for example to calculate the time taken by particular events or tasks]. ^[1]_{SEP}</p>
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