

## Subject Progression

### Mathematics – Year 3

| Autumn 1  | Autumn 2   | Spring 1   | Spring 2  | Summer 1   | Summer 2  |
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| <p>Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</p> <p>Intervention for KS1 times tables if required</p> <p>All times tables with particular focus on 7, 6, 5, 4, 3 x tables</p> <p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p>Counting in 50s and 100s</p> <p>10/100 more of less than a number</p> <p><i>Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning</i></p> <p><i>Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.</i></p> <p><i>Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.</i></p> <p>Addition and subtraction written strategies</p> | <p>Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</p> <p>Intervention for KS1 times tables if required</p> <p>All times tables with particular focus on 12, 11, 9, 8 x tables</p> <p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p>Counting in 50s and 100s</p> <p>10/100 more of less than a number</p> <p><i>Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning</i></p> <p><i>Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.</i></p> <p><i>Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.</i></p> <p><i>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number</i></p> | <p>Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</p> <p>All times tables with particular focus on 7, 6, 5, 4, 3 x tables</p> <p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p>Counting in 50s and 100s</p> <p>10/100 more of less than a number</p> <p><i>Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning</i></p> <p><i>Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.</i></p> <p><i>Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.</i></p> <p><i>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</i></p> | <p>All times tables with particular focus on 12, 11, 9, 8 x tables</p> <p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p><i>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</i></p> <p><i>Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</i></p> <p><i>Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.</i></p> <p><i>Add and subtract fractions with the same denominator, within 1.</i></p> <p><i>Reason about the location of any fraction within 1 in the linear number system.</i></p> <p><i>Find unit fractions of quantities using known division facts (multiplication tables fluency)</i></p> <p>Addition and subtraction written strategies</p> | <p>All times tables with particular focus on 7, 6, 5, 4, 3 x tables</p> <p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p><i>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</i></p> <p><i>Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</i></p> <p><i>Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.</i></p> <p><i>Add and subtract fractions with the same denominator, within 1.</i></p> <p><i>Reason about the location of any fraction within 1 in the linear number system.</i></p> <p><i>Find unit fractions of quantities using known division facts (multiplication tables fluency)</i></p> <p>Addition and subtraction written strategies</p> | <p>All times tables with particular focus on 12, 11, 9, 8 x tables</p> <p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p> <p><i>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</i></p> <p><i>Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</i></p> <p><i>Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.</i></p> <p><i>Add and subtract fractions with the same denominator, within 1.</i></p> <p><i>Reason about the location of any fraction within 1 in the linear number system.</i></p> <p><i>Find unit fractions of quantities using known division facts (multiplication tables fluency)</i></p> <p>Addition and subtraction written strategies</p> |

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| <p>Addition and subtraction of fractions with same denominator</p>  | <p><b>lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</b></p> <p><i>Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</i></p> <p>Addition and subtraction written strategies</p> <p>Addition and subtraction of fractions with same denominator</p> <p>Multiplication and division strategies</p>   | <p>Addition and subtraction written strategies</p> <p>Addition and subtraction of fractions with same denominator</p> <p>Multiplication and division strategies</p> <p>Fractions of quantities (Unit and non-unit)</p>  | <p>Addition and subtraction of fractions with same denominator</p> <p>Multiplication and division strategies</p> <p>Fractions of quantities (Unit and non-unit)</p>  | <p>Addition and subtraction of fractions with same denominator</p> <p>Multiplication and division strategies</p> <p>Fractions of quantities (Unit and non-unit)</p>   | <p>Addition and subtraction of fractions with same denominator</p> <p>Multiplication and division strategies</p> <p>Fractions of quantities (Unit and non-unit)</p>   |
| <p><b>Place Value (3 weeks)</b></p> <p><i>Calculate complements to 100.</i></p> <p><i>Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning</i></p> <p><i>Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.</i></p> <p>To compare and order numbers to 1000.</p> <p>To find 10 or 100 more or less than a number.</p> <p>To write numbers in numerals and words</p> <p>To count in multiples of 50 or 100.</p> <p><i>Reason about the location of any three-digit number in the linear number system, including</i></p> | <p><b>Addition and Subtraction, (1 week)</b></p> <p>To add/subtract a 3-digit number and ones/tens/hundreds.</p> <p>To add/subtract numbers up to 3 digits with a formal written method.</p> <p>To estimate an answer to a calculation.</p> <p>To use the inverse operation to check the answer to a calculation.</p> <p><b>Multiplication and Division (3 weeks)</b></p> <p>To calculate 2 digit multiplied by 1 digit numbers using a formal written method.</p> <p>To calculate 2 digit numbers divided by 1 digit numbers using a formal written method.</p> <p>To solve missing number problems including positive integer scaling problems and correspondence problems.</p> | <p><b>Multiplication and Division (4 weeks)</b></p> <p><i>Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.</i></p> <p>To calculate 2 digit multiplied by 1 digit numbers using a formal written method.</p> <p>To calculate 2 digit numbers divided by 1 digit numbers using a formal written method.</p> <p>To solve missing number problems including positive integer scaling problems and correspondence problems.</p> <p><b>Shape (2 weeks)</b></p> <p>To draw 2-D shapes, know their names and describe them.</p> <p>To make 3-D shapes using modelling materials, recognise</p> | <p><b>Fractions (4 weeks)</b></p> <p><i>Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.</i></p> <p>To compare and order fractions with the same denominator within one whole.</p> <p><b>Add and subtract fractions with the same denominator, within 1.</b></p> <p>Count up and down in tenths: recognise as fraction and as decimal.</p> <p>To recognise and show equivalent fractions with small denominators.</p> <p><i>Reason about the location of any fraction within 1 in the linear number system.</i></p> <p><i>Find unit fractions of quantities using known division facts (multiplication tables fluency).</i></p> <p>To recognize, find and write fractions of a discrete set of objects: unit fractions and non-unit</p> | <p><b>Fractions (2 weeks)</b></p> <p>To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</p> <p>To compare and order fractions with the same denominator within one whole.</p> <p>Count up and down in tenths: recognise as fraction and as decimal.</p> <p>To recognise and show equivalent fractions with small denominators.</p> <p>To recognize, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators: particular attention to half, quarter and three-quarters.</p> <p><b>Length and Perimeter (1 weeks)</b></p> | <p><b>Statistics (2 weeks)</b></p> <p>To interpret and present data using bar charts, pictograms and tables</p> <p><b>Time (4 weeks)</b></p> <p>To tell and write the time to the nearest minute from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</p> <p>To compare durations of events.</p> |

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| <p><i>identifying the previous and next multiple of 100 and 10.</i></p> <p><i>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</i></p> <p><b>Addition and Subtraction, (4 weeks)</b></p> <p>To add/subtract a 3-digit number and ones/tens/hundreds.</p> <p><i>Add and subtract up to three-digit numbers using columnar methods.</i></p> <p><i>Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</i></p> <p>To estimate an answer to a calculation.</p> <p>To use the inverse operation to check the answer to a calculation.</p> | <p><b>Money(1 week)</b></p> <p>To add and subtract amounts of money to find change, using £ and p.</p> | <p>them in different orientations and describe them.</p> <p>To recognise right, acute or obtuse angles within a shape.</p> <p><i>Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.</i></p> <p>To identify horizontal, diagonal or vertical lines.</p> <p>To identify pairs of parallel or perpendicular lines.</p> <p><i>Draw polygons by joining marked points, and identify parallel and perpendicular sides.</i></p> | <p>fractions with small denominators: particular attention to half, quarter and three-quarters.</p> <p><b>Length and Perimeter (2 weeks)</b></p> <p>To measure and compare lengths (m/cm/mm)</p> <p>To measure the perimeter of simple 2D shapes</p> | <p>To measure and compare lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>To measure the perimeter of simple 2D shapes</p> <p><b>Mass and Capacity (3 weeks)</b></p> <p>. To measure and compare mass (kg/g); volume/capacity (l/ml)</p> |  |
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**RTPC Key Concept Focus** Ongoing Fluency Focus Calculation Focus