Year 5 Mathematics Yearly Overview

|  | 04/09/23 | I I/09/23 | \| 8/09/23 | 25/09/23 | 02/10/23 | 9/10/23 | 16/10/23 |  |
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| Autumn I | Place Value <br> Roman numerals to 1000; numbers to 10,000 , numbers to 100, 000; numbers to $\mathrm{I}, 000,000$, read and write numbers to I,000,000 | Place Value <br> Powers of 10 , find 10/100/1000/ 10,000/I00,000 more or less; partition numbers to $1,000,000$; number line to 1,000,000 | Place Value <br> Compare and order numbers to 100,000; compare and order numbers to $1,000,000$; round to the nearest 10,100 or I,000; round within 100,000; round within I,000,000 | Addition and Subtraction Mental strategies; Add whole numbers with more than 4 digits; Subtract whole numbers with more than 4 digits; Round to check answers | Addition and <br> Subtraction <br> Inverse <br> operations <br> (addition and <br> subtraction); <br> Multi-step <br> addition and <br> subtraction <br> problems; <br> Compare <br> calculations; Find <br> missing numbers | Multiplication and Division Multiples; Common multiples; square numbers | Multiplication and Division <br> Multiply by 10 , 100 and 1,000 ; <br> Divide by 10,100 <br> and $\mathrm{I}, 000$; <br> Multiples of 10 , 100 and 1,000 . |  |
|  | Vocabulary: <br> Roman numerals; digit; place value; column; ones; tens; hundreds; thousands; ten-thousands; hundred-thousands; millions | Vocabulary: <br> Partition; more; less; number line; greater than; less than; value; ones; tens; hundreds; thousands; tenthousands; hundredthousands; millions | Vocabulary: <br> Greater than; less than; equal to; ascending; descending; smallest; biggest; round; nearest; value | Vocabulary: <br> Add; subtract; estimate; check; place value; column; ones; tens; hundreds; thousands; tenthousands; hundredthousands; millions | Vocabulary: <br> Inverse; add subtract; <br> RUCSAC; <br> compare; order; greater than; less than; estimate; check | Vocabulary: <br> Multiples; multiply; groups of; lots of; arrays; repeated addition; product; multiplicand; square; cubed; | Vocabulary: <br> Powers of IO; multiply; divide; multiples; factors; place value; column; ones; tens; hundreds; ten-thousands; hundredthousands; millions |  |
|  | Mental: <br> Methods for known facts | Mental: <br> Methods for known facts Times tables up to $12 \times 12$ | Mental: <br> Methods for known multiplication and division facts Times tables up to $12 \times 12$ | Mental: <br> Add and subtract numbers mentally (using partitioning, rounding up etc.) | Mental: <br> Mentally adding numbers and estimating answers. | Mental: <br> Using the inverse to check calculations | Mental: <br> Multiplying and dividing by 10 , 100, 1000; |  |
|  | 30/10/23 | 06/ I I/23 | \| 3/1 1/23 | 20/II/23 | 27/II/23 | 4/1 2/23 | I I/ \| 2/23 | $\begin{aligned} & 18 / 12 / 23 \\ & \text { (Mon - Wed } \\ & \text { only) } \end{aligned}$ |


| $\begin{gathered} \text { Autumn } \\ 2 \end{gathered}$ | Multiplication and Division <br> Factors; Common factors; Prime numbers | Fractions <br> Find fractions equivalent to a unit fraction; find fractions equivalent to a non-unit fraction; recognise equivalent fractions | Fractions Convert between improper fractions and mixed fractions; compare and order fractions less than I; compare and order fractions greater than I | Fractions <br> Add and subtract fractions with the same denominator; add fractions within I; add fractions with a total greater than I; add to a mixed number; add two mixed numbers | Fractions <br> Subtract fractions; subtract from a mixed number; subtract from a mixed number breaking the whole; subtract two mixed numbers | Multiplication and Division Multiply 3-digits by I digit; Multiply 4-digits by I-digit; multiply 2-digits (area model) | Multiplication and Division Multiply 2-digits by 2-digits; Multiply 3-digits by 2-digits; Multiply 4-digits by 2 -digits | Multiplication and Division Multiply by 2-digit numbers |
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|  | Vocabulary: divide; factors; prime number; share equally | Vocabulary: <br> Fraction; numerator; denominator; vinculum; divide; share equally; equivalent; value; simplify; simplest form | Vocabulary: Improper fraction; mixed number; integer; whole number; numerator; denominator; vinculum; divide; value; greater than; less than; simplify | Vocabulary: <br> Add; subtract; fractions; simplify; numerator; denominator; vinculum; mixed number; whole number; integer; improper fraction | Vocabulary: <br> Add; subtract; fractions; simplify; numerator; denominator; vinculum; mixed number; whole number; integer; improper fraction | Vocabulary: Multiply; partition; multiplicand; groups of; lots of; place value; ones, tens, hundreds, thousands, tenthousands; hundredthousands; millions | Vocabulary: <br> Multiply; partition; multiplicand; groups of; lots of; place value; ones, tens, hundreds, thousands, tenthousands; hundredthousands; millions | Vocabulary: <br> Multiply; partition; multiplicand; groups of; lots of; place value; ones, tens, hundreds, thousands, tenthousands; hundredthousands; millions |
|  | Mental: <br> Multiples and factors, prime numbers | Mental: <br> Multiples and factors | Mental: <br> Multiples and factors | Mental: <br> Multiples and factors | Mental: <br> Use rounding to check calculations | Mental: <br> Multiplying numbers by 0 | Mental: <br> Multiplication facts up to $12 \times$ 12 and division facts. | Mental: <br> Multiplication facts up to $12 \times$ 12 and division facts. |
|  | 08/0 I/24 | 15/01/24 | 22/01/24 | 29/01/24 | 05/02/23 | 12/2/24 |  |  |
| Spring I | Multiplication and Division Divide 3-digits by Idigit; Divide 4-digits by I-digit; Divide with remainders | Fractions Multiply unit fractions by an integer; Multiply non-unit fractions by an integer; Multiply mixed | Fractions <br> Calculate fractions of a quantity; Calculate fractions of an amount; Using fractions as operators | Decimals and <br> Percentages <br> Decimals up to <br> 2d.p.; Decimals as fractions; <br> Understand thousandths; | Decimals and Percentages <br> Thousandths as decimals; Rounding decimals; Order and compare decimals | Decimals and percentages Understand percentages; Percentages as fractions and decimals; Equivalent FDP |  |  |


|  |  | fractions by an integer |  |  |  |  |  |  |
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|  | Vocabulary: <br> Divide; dividend; divisor; quotient; groups of; lots of; shared equally; factors; inverse; | Vocabulary: <br> Unit fraction; numerator; denominator; integer; whole number; mixed fraction; improper fraction; multiply | Vocabulary: <br> Multiply; divide; fraction; numerator; denominator; vinculum; shared equally; | Vocabulary: Decimal point; decimal place; convert; equivalent; fraction; tenths; hundredths; thousandths | Vocabulary: <br> Decimal point; decimal place; convert; equivalent; fraction; tenths; hundredths; thousandths; compare; greater than; less than; equal to | Vocabulary: <br> Percent; decimal; fraction; equivalent; numerator; denominator; vinculum; hundredth; tenth |  |  |
|  | Mental: <br> Multiplication facts up to $12 \times 12$ and division facts. | Mental: <br> Doubling/ Halving, estimation, inverse. | Mental: <br> Doubling/ Halving, estimation, inverse. | Mental: <br> Number bonds up to 100 | Mental: <br> Number bonds up to 100 | Mental: <br> Number bonds up to 100 |  |  |
|  | 26/02/24 | 4/03/24 | I I/03/24 | 18/03/24 | 25/03/24 |  |  |  |
| Spring 2 | Perimeter and AreaMeasure perimeter; Perimeter on a grid; Perimeter of rectangles and rectilinear shapes; Calculate perimeter | Perimeter and AreaArea of rectangles; Area of compound shapes; Area of irregular shapes | StatisticsInterpret charts; comparison, sum and difference; Read and interpret line graphs, draw line graphs, use line graphs to solve problems | StatisticsRead and interpret tables; two-way tables; timetables | Shapeldentify angles, compare and order angles; Measure angles in degrees; Measure angles with a protractor; |  |  |  |
|  | Vocabulary: <br> Perimeter; area; rectangle; rectilinear; length; $\mathrm{cm} ; \mathrm{m} ; \mathrm{mm}$ | Vocabulary: <br> Area; rectangle; compound; regular; irregular; multiply; array | Vocabulary: <br> Interpret; data; survey; sum; difference; line graph; bar graph; pictogram; table; xaxis; $y$-axis; along the corridor and up the stairs | Vocabulary: <br> Tables; timetable; hour; minute; row; column; data; survey; sum; difference | Vocabulary: <br> Angles; obtuse; acute; right angle; reflex angles; degrees; protractor; baseline |  |  |  |
|  | Mental: <br> Multiplying 3 numbers e.g. $3 \times 3 \times 3$ | Mental: <br> Multiplying 3 numbers e.g. $3 \times 3$ $\times 3$ | Mental: <br> Mental strategies for addition and subtraction | Mental: <br> Mental strategies for addition and subtraction | Mental: <br> Mental strategies for the four |  |  |  |


|  |  |  |  |  | operations within 360 (angles) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15/04/24 | 22/04/24 | 29/04/24 | 06/05/24 | 13/05/24 | 20/05/24 |  |
| Summer I | Shape <br> Drawling lines and angles accurately; Calculating angles on a straight line; Calculating angles around a point | Shape <br> Triangles and quadrilaterals; Calculating lengths and angles in shapes; Regular and irregular polygons; Reasoning about 3-D shapes | Position and Direction Describe position and draw on a grid; Position in the first quadrant; Translation; Translation with coordinates | Position and <br> Direction <br> Lines of symmetry; Complete a symmetric figure; Reflection; Reflection with coordinates | Decimals <br> Adding decimals within I; subtracting decimals within I; Complements to I; adding decimals - crossing the whole | Decimals <br> Adding and subtracting decimals with the same number of decimal places; Adding and subtracting decimals with a different number of decimal places |  |
|  | Vocabulary: <br> Angles; degrees; protractor; measure; baseline; acute; obtuse; right angles; | Vocabulary: <br> Triangle; quadrilateral; angles; acute; obtuse; regular; irregular; polygon; 2-D; 3-D; length; width; circle; square; rectangle; pentagon; hexagon; heptagon; octagon etc. | Vocabulary: <br> Coordinates; x axis; $y$-axis; along the corridor and up the stairs; quadrant; translate; position; rotate; | Vocabulary: <br> Symmetry; reflection; translate; position; rotate; coordinates; x axis; $y$-axis; along the corridor and up the stairs | Vocabulary: <br> Decimal number; decimal place; decimal point; tenths; hundredths; thousandths; complement; add; subtract whole; | Vocabulary: <br> Decimal number; decimal place; decimal point; tenths; hundredths; thousandths; complement; add; subtract whole; |  |
|  | Mental: <br> Mental strategies for the four operations within 360 (angles) | Mental: <br> Mental strategies for the four operations within 360 (angles) | Mental: <br> Mental strategies for the four operations within 360 (angles) | Mental: <br> Mental strategies for the four operations within 360 (angles) | Mental: Inverse to check calculations | Mental: Inverse to check calculations |  |
|  | 03/06/24 | 10/06/24 | 17/06/24 | 24/06/24 | 01/07/24 | 08/07/24 | $\begin{gathered} 17 / 7 / 24 \\ \text { (Mon - Thu only) } \end{gathered}$ |
| $\underset{2}{\text { Summer }}$ | Decimals <br> Adding and subtracting wholes and decimals; Decimal | Negative numbers Real life application of | Converting units Kilometres; Kilograms and kilometres; | Converting units Imperial units; Converting units | Volume <br> What is volume? <br> Compare volume; | Consolidation <br> This week to act as a buffer for any units that over run or to revisit | Consolidation <br> This week to act as a buffer for any units that over run or to revisit |


|  | sequences; Multiplying and dividing decimals by 10,100 and 1000 | negative numbers; <br> Number line; <br> Subtract integers <br> crossing 0; add <br> integers crossing <br> 0 | Millimetres and millilitres; Metric units | of time; <br> Timetables | Estimate volume; Estimate capacity | concepts children struggled with | concepts children struggled with |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vocabulary: <br> Whole; decimal; sequence; add; subtract; multiply; divide; powers of IO; decimal point; decimal place; | Vocabulary: <br> Integer; negative number; number line; add; subtract; cross 0; | Vocabulary: <br> Kilometre; metre; centimetre; millimetre; litres; millilitres; grams; kilograms; convert | Vocabulary: <br> Imperial; metric; timetables; convert; am; pm; \| 2-hour; 24-hour; | Vocabulary: <br> Volume; capacity; scale; greater than; less than; estimate; | Vocabulary: | Vocabulary: |  |  |
|  | Mental: inverse to check calculations | Mental: <br> Mental strategies for addition and subtraction involving decimals | Mental: <br> Multiplying by IO, 100 and 1000 | Mental: <br> Multiplying by 10 , 100 and 1000,15 , 30 and 60 times tables (to support times) | Mental: <br> Multiplying by IO, 100 and 1000 | Mental: <br> Review of all multiplication and division facts with speed test. | Mental: <br> Review of all multiplication and division facts with speed test. |  |  |

