Mathematics Curriculum Overview 2023-2024

|  | Autumn I | Autumn 2 | Spring 2 | Spring 3 | Summer 2 | Summer 2 |
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| Year I | Recap EYFS <br> Place value and number bonds within 5 and then 10 <br> Addition and subtraction to 10 <br> Comparison of number | Place value and number bonds up to 20 <br> Addition and subtraction <br> within 10 <br> Shape - 2D and recognising 3D | Addition and subtraction up to and within 20 Recognising and counting numbers up to 50 | Place value to 50 <br> One more, one less <br> Addition and Subtraction up to and within 20 <br> Missing number problems Measurement length height in non- standard using longer shorter and equal to, and standard units using a ruler in cm from the zero. <br> Weight and volume in nonstandard units -using terms heavier and lighter. <br> Time - introduction to the hour and half hour. | Number Multiplication and division Fractions - finding a half. Introducing making a quarter | Position and direction describing position using quarter and half and three quarter turns Place value to 100 Multiplication and division - equal groups arrays and doubles Addition and subtraction using values on coins, I, 25 IO, 20 and 50 pence and $£ 1$ and £2coins Measurement Money \& Time |
|  | Experience in counting in $1 \mathrm{~s}, 2 \mathrm{~s}, 3 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s . Develop an understanding of the early relationship between repeated addition and the multiplication symbol. |  |  |  |  |  |
| Year 2 | Place Value - within 20, 50 and 100 <br> Addition and Subtraction <br> Fact families - number bonds to 100 <br> Addition and subtraction <br> 2digits to I digit including crossing the 10 boundary <br> Times tables <br> $2 \times$ | Multiplication and Division Making equal groups, arrays Properties of Shape Symmetry 2D and 3D Lines of symmetry Times tables $5 \times$ | Comparing and making amounts using coins - two step problem solving <br> Using standard English coins and notes up to $£ 10$ <br> Multiplication and Division <br> Using the x and $\div$ signs <br> Dividing by 25 and 10 <br> Arrays and grouping. <br> Times tables <br> 10 x | Fractions <br> Find half quarter three quarters and thirds <br> Understanding unit and non unit fractions. Equivalence. <br> Measurement <br> Length and height in cm and $M$ <br> $100 \mathrm{~cm}=1 \mathrm{M}$ <br> Times tables <br> $3 \times$ | Time <br> Recap of previous hour, half hour quarter to and past and 5 minute intervals. <br> Finding the duration <br> Geometry <br> Position and direction <br> Describing left right, forwards and backwards on a grid. <br> Recapping YI quarter half and three quarter turns. <br> Times tables <br> II x | Statistics <br> Tally charts pictograms and block diagrams <br> Using scales in 2,5 and 10 . <br> Temperature - reading scales Mass <br> Capacity in g and Kg <br> Volume ml and L <br> Application of the four operations in problem solving for volume and capacity <br> Times tables <br> Revision of $2 \mathrm{~s}, 5 \mathrm{~s}, 10 \mathrm{~s}, 3 \mathrm{~s}$ and IIs |
| Year 3 | Place Value <br> Recap Y2 to 100 <br> Represent to 1000 <br> Addition and subtraction <br> 3 digit to I digit including crossing 10 <br> 3 digit by 2 digit including crossing the 100 boundary <br> Times tables <br> $4 \times$ (building on $2 x$ ) | Addition and Subtraction <br> Problem solving involving 3 digit $\times$ 1 and 3 digit $\times 2$ <br> Multiplication and Division <br> Recapping Y2 <br> Multiplying and dividing by 8 using resources to support. <br> Times tables $0 x \text { and } I x$ | Multiplication and Division Recapping Y2 <br> Multiplying and dividing by 8 using resources to support. <br> Multiply and divide 2 digits $\times 1$ Grouping, arrays and bar models. Begin to use formal method with place value chart and counters Length and perimeter $\mathrm{mm}, \mathrm{cm}$ and M . <br> Fractions <br> Recap - half quarter third and three quarters <br> Equivalence of half and two quarters <br> Times tables <br> Revision of $2 \mathrm{~s}, 5 \mathrm{~s}, 10 \mathrm{~s}, 3 \mathrm{~s}, 11 \mathrm{~s}, 4 \mathrm{~s}$, 0 s and Is | Fractions <br> Recap - half quarter third and three quarters <br> Equivalence of half and two quarters <br> Mass and capacity <br> Measuring using scales and reading in g and Kg , ml and L Adding and subtracting mass to solve problems <br> Times tables $8 \times$ (building on $4 \times$ ) | Fractions <br> Introducing decimal fractions <br> Tenths <br> Fractions on a number line and of objects Adding and subtracting fractions. <br> Money <br> Adding and subtracting, finding change. <br> Time <br> Telling to the nearest minute and 5 minutes <br> Introducing the 24 hour clock <br> Problem solving involving <br> duration <br> Times tables <br> $6 \times$ (building on $3 \times$ ) | Shape <br> 2D including properties of shape <br> 3 D Shape names properties <br> Introducing turns and angles <br> Right angles parallel and <br> perpendicular <br> Statistics <br> Recapping pictograms <br> Bar charts and tables - scales in <br> 2,3,4,8 and 10 <br> Times tables <br> Revision of $2 \mathrm{~s}, 5 \mathrm{~s}, 10 \mathrm{~s}, 3 \mathrm{~s}$, $1 \mathrm{Is}, 4 \mathrm{~s}$, $0 \mathrm{~s}, 1 \mathrm{~s}, 8 \mathrm{~s}$ and 6 s |


| Year 4 | Place Value <br> Recognising digits to 1000 and 10,000 <br> Rounding to the nearest 10,100 and 1000 <br> Introducing negative numbers Addition and Subtraction Recap on adding and subtracting <br> 3 digit $\times 3$ digit numbers crossing 10 and 100 boundary <br> Adding and subtracting 4 digit numbers without and with exchanging <br> Times tables <br> $12 \times$ (building on $6 \times$ and $3 \times$ ) | Measurement Area (counting squares) <br> Multiplication and division $x \text { and } \div \text { by } 10 \text { and } 100$ <br> Know how to multiply by I and 0 <br> Times tables <br> $7 x$ | Multiplication and division <br> Formal written method <br> 2 digit $\times \mathrm{I}, 3$ digit $\times \mathrm{I}$ <br> Measurement length and perimeter. Perimeter on a grid and on rectilinear shapes <br> Recap from Y3 <br> Times tables <br> Revision of $2 \mathrm{~s}, 5 \mathrm{~s}, 10 \mathrm{~s}, 3 \mathrm{~s}, 11 \mathrm{~s}, 4 \mathrm{~s}$, <br> $0 \mathrm{~s}, \mathrm{Is}, 8 \mathrm{~s}, 6 \mathrm{~s}, \mathrm{I} 2 \mathrm{~s}$ and 7 s | Fractions <br> Greater than one <br> Adding and subtracting fractions of a quantity. <br> Calculate quantities problem solving <br> Decimals <br> Recap recognising tenths and hundredths <br> Divide I digit by 10 and 2 digit by 10 <br> Compare order and round decimals. <br> Times tables <br> 9 x | Decimals <br> Recap recognising tenths and hundredths <br> Divide I digit by 10 and 2 digit by 10 <br> Compare order and round decimals. <br> Money <br> Adding subtracting giving change Multiplying and dividing using coins and notes <br> Problem solving <br> Time <br> Recapping I minute and 5 minute and 24 hour clock <br> Analogue to digital 12 and 24 hour <br> Times tables <br> Revision of all times tables $0-12$ | Place Value <br> Recap and introducing 100,000 <br> Rounding to 1000,000 <br> Statistics <br> Interpreting charts <br> Introducing line graphs <br> Shape <br> Introducing angles - properties <br> and symmetry of triangles, <br> quadrilaterals. <br> Position and direction <br> Describing movement on a grid <br> Times tables <br> Revision of all times tables $0-12$ <br> MTC check |
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| Year 5 | Place Value <br> Recognising digits up to 10,000 and rounding to the nearest million <br> Comparing and ordering numbers to I million <br> Addition and Subtraction <br> Formal column methods Whole numbers with more than four digits, without and with more than one exchange. | Multiplication and division Multiples factors prime numbers squares and cubes <br> By 10100 and 1000 <br> All Times tables fluent up to $12 \times$ 12 <br> Fractions <br> Equivalence $1 / 21 / 41 / 3$ finding multiple equivalents Improper and mixed fractions Comparing and ordering | Multiplication and division Recap Y4 <br> Multiply 4 digits $\times$ land by 2,2 <br> digit $\times 2$ digit and 3 digit by 2 digit <br> Divide <br> Recap Y4 <br> Divide 4 digits by I including <br> remainders <br> Fractions <br> Recap Equivalence $1 / 21 / 4$ I/3 <br> finding multiple equivalents <br> Improper and mixed fractions <br> Comparing and ordering <br> Adding and subtracting with the same and different denominators <br> Adding and subtracting mixed <br> numbers <br> Multiplication of fractions and mixed numbers by a whole number <br> Finding fractions of amounts | Decimals and Percentages <br> Recap y5 <br> Rounding decimals <br> Understanding thousandths <br> Introduce percentages as <br> fractions <br> Finding equivalent \% to fractions. <br> Perimeter and area. <br> Calculating in cm and m <br> Area - of rectangle and <br> compound shapes <br> Recap of addition and subtraction <br> from aut I <br> Statistics <br> Reading and interpreting line <br> graphs <br> Reading and interpreting tables | Recap of addition subtraction multiplication and division Decimals <br> Adding and subtracting within I, crossing the whole <br> $X$ and $\div$ by 10,100 and 1000 from any place <br> Geometry <br> Identifying and comparing and ordering right acute and obtuse angles. <br> Measuring using a protractor <br> Calculating angles on a straight <br> line and around a point <br> Identifying angles within shapes <br> Shape <br> Recognising a range of polygons <br> Recap properties of triangles and quadrilaterals (Y4) <br> Understanding regular and <br> irregular shape <br> Recap Symmetry (Y4) for 2D <br> shape <br> Reasoning about 3D shapes <br> Position and direction <br> Recap Y4 <br> Position in first quadrant <br> Translation reflection and finding co-ordinates | Recap of addition subtraction multiplication and division Formal column method addition and subtraction <br> Introduce short division without remainders using formal method <br> Number Negative numbers <br> Converting units <br> Metric to imperial <br> Within metric for mass, volume and capacity |

Place Value
Y5 recap
Recognising digits up to 10 million
Rounding any number
Negative numbers

## Number sense

Squares, cubes, factors, prime

## numbers

Common multiples
Order of operations

## Addition and subtraction

Recap Y5
Add whole numbers with more
than 4 digits
Multi step addition and
subtraction problem solving
Multiplication and division
Recap short division
Divide using factors and with
remainders
Introduce long division

## Fractions

Compare and order using the
denominator and numerator
Add and subtract fractions which are multiples
Add mixed numbers
Multiply \& divide fractions

## Decimal fractions

Understand and order up to 3dp Multiply and divide by 10, 100 and 1000 (recap Y5)
Convert decimal fractions to percentages and vice versa. Geometry
Identify the parts of a circle Understand graphs in four quadrants, translate and reflect shapes within four quadrants

Fractions and percentages Finding the LCM
Finding fractions of amounts Finding any percentage of an amount using known facts

## Shape

Recognising a range of polygons Understanding regular and irregular shape (Y5 recap)

## Converting units

## Measure - recap Y5

Calculate with metric measures in mm cm m and km
Converting imperial to metric Miles to km
Problem solving with metric measures using all four operations.

## Area and perimeter

Area of a triangle using rectangles
Finding and comparing the area of
compound shapes
Perimeter of compound shapes
(Y5 recap)

Ratio and proportion
Pictorial methods
Calculating simple ratio Multiplication by scale factors Ratio and proportion problem solving - including missing values

## Algebra

Finding a rule
Substitution
Understanding formula

## Angles

Recap - right angles, obtuse and acute
Angles in a triangle and on a straight line
Using known properties of types of triangle to solve problems Measuring accurately with a protractor (recap Y5)

## Statistics

Read and interpret pie charts Connecting knowledge angle around a point
Connecting \% to degrees eg $360^{\circ}$ = 100\%

## tatistic

Interpreting line graphs (Y5 recap)
Drawing and solving problems with line graphs
Converting Measure
Multiply and divide by 10, 100 and
1000 efficiently when converting measurement within problem solving

## Area and perimeter

## Recap Spring learning

Calculating volume using cubes Introduce formula for calculating volume
Angles
Using knowledge of angles in triangles and rectangles to calculate missing angles

## Algebra

Recap spring learning
Use simple formula to solve problems including with missing amounts
Ratio
Recap learning from spr. 2

