Mathematics Learning Journey

KS3

YR7 Geometry
YR7 Statistics
YR7 Algebra
YR7 Measures
YR7 Ratio, Proportion and Rates of Change.
Y7 Number
Use algebraic formula
Work with sequences
YR6 Algebra
Solve equations with missing values.

YR6 Shape, Movement and Direction
Know and understand: coordinates(4 quadrants), translation, reflection, angles (missing and inside shapes), properties of 2d/3d shapes (and nets) and circle properties (radius, diameter and circumference)

Calculate fractions (proper, mixed , improper) using + - x ÷
Compare and order fractions, decimals (up to 3dp) and %.
YR6 Fractions, Decimals and Percentages
Know and can find equivalent fractions proper, mixed, improper), decimals and %

Know: multiples, factors, common multiples and factors, square and cube numbers and primes under 100.
Use decimal and fraction remainders
Solve calculations up to:
4-digit X 2-digit(formal method)
4-digit ÷ 2-digit (formal method)
Mental multiplication
Mental division
YR6 Multiplication and Division
Solve problems with mixed operations.
Complete mental and written methods of calculation, including the order of operations.

Compare relative sizes, quantities and amounts (including missing values problems).
YR6 Ratio and Proportion
Interpret, create and solve problems linked to data: pictograms, bar, line graphs, tables and pie charts. Solve averages.
YR6 Statistics
Work with:g,kg,l,ml,seconds, minutes, hours, days, months, years, money (£ and p), length (mm,cm,m,km), area (triangles/parallelograms), perimeter and volume.
YR6:Measures

YEAR 6

Work with:g,kg,l,ml,seconds, minutes, hours, days, months, years, money (£ and p), length (mm,cm,m,km), area and perimeter.
Know the properties of 2d/3d shape.
Know if shapes are regular/ irregular.
Read, write, compare and order numbers up to 10,000,000.
Work with decimals to 3dp and also negative numbers.
Complete multi-step problems for + - x ÷
YR6 Addition and Subtraction
YR5 Measures
Convert between measures.
YR5 Shape, Movement and Direction
Know about, identify and draw angles: acute, right angles, obtuse, straight lines and reflex using degrees.
Interpret tables, bar and line graphs.
YR6 Place Value
Round to required degree of accuracy: to 10, 100,1000, 10000 and 3dp.
YR5 Statistics
Compare data
Solve: area, perimeter and volume.
Understand movement and position of shapes: coordinates, translation, reflection .
Solve problems using data
Know the place value of digits to 10,000,000.
Use symbols to compare fractions.

+ and - fractions with the same denominator and multiples of the same denominator.
Work with fractions and decimals up to 3dp
YR5 Fractions, Decimals and Percentages
Multiply fractions by whole numbers.
Understand the link between improper and mixed fractions.
Understand % and can find equivalent fractions, decimals and percentages.
Divide 4-digit by 1-digit number.
Solve problems involving + - x ÷
I can solve:
4-digit X 1-digit
4-digit X 2-digit
I can multiply numbers mentally.
YR5 Multiplication and Division
Know what = symbol means
Identify multiples, factors, common factors and also square, cube, prime(under 100) and composite numbers.
Add/subtract numbers, that are larger that 4 digits using formal method.
Round numbers to check calculations.
Solve multi-step problems.
YR5 Addition and Subtraction
Add and subtract large numbers mentally.
Round numbers to 10,100,1000, 10 000
Read Roman numerals to 1000
Work with negative numbers.
Count in powers of 10.
YR5 Place Value
Read, compare and order numbers to 1,000,000

YEAR 5

Work with:g,kg,l,ml,seconds, minutes, hours, days, months, years, money (£ and p), length (mm,cm,m,km), area and perimeter.
Convert between measures.
YR4 Measures
Classify geometric shapes and know quadrilaterals/triangles
Compare shapes' properties and size.
Work with symmetry and draw symmetrical images with one line of symmetry.
Describe the position and movement of shapes (translation).
Recognise and know acute and obtuse angles and locate right angles by size.
YR4 Shape, Movement and Direction
Understand and use coordinates with 1 quadrant
Interpret/read data: discrete/continuous
Read graphs: bar graphs and pictograms.
YR4 Statistics
Solve problems that require the interpretation and presentation of data.

YEAR 4

÷ by 10,100 including decimals. up to 2dp.
Multiply 2d x 1d (formal method).
Know and recall times table facts up to 12 X 12.
Add and subtract numbers with up to 4-digits.
Know 1000 more or less than a number.
Solve problems with negative numbers.
Count in multiples: 6,7,25,1000.
Multiply 3d x 1d (formal method)
Use place value to X and ÷ mentally and multiply by 1 and 0.
Use the inverse methods to check their work.
YR4 Addition and Subtraction
Use both mental and formal methods.
Order/compare numbers up to 1000.
Know place value for any 4-digit number.
YR4 Place Value
Know Roman numerals to 100.
Calculate fractions.
Divide using short division method
YR4 Multiplication and Division
Know factor pairs.
Estimate answers.
Solve 2-step problems using addition and subtraction.
Round numbers to 10, 100, 1000.
Round decimals to whole numbers
Count and work with tenths.
YR4 Fractions, Decimals and Percentages
Know and solve common equivalent fractions and decimals.
Count and work with hundredths.

YEAR 3

count in Multiples of: 4,8,50,100.
I can find 10, 100 more or less.
Work with word problems and problems with missing digits.
Work with and calculate fractions with small denominators
Work with 2d and 3d shapes.
YR3 Shape, Movement and Direction
Know angles and work with right angles up to a full turn.
YR3 Number & Place Value
Writing, ordering and comparing numbers below 1000.
YR3 Addition and Subtraction
Add and subtract numbers with up to 3digits.
Use the inverse to check answers.
YR3 Fractions, Decimals and Percentages
Order fractions with small denominators.
Find fractions of amounts.
Work with tenths: counting and dividing into tenths.
Recognise shape In different orientations.
Know parallel And perpendicular lines.
know place Value of digits in a 3-digit number.

Know/recall X and ÷ facts for the 3,4,5 and 8 times table.
YR3 Multiplication and Division
Multiply mentally and divide mentally
Multiply with a formal method: a 2-digit number and 1-digit number.
YR3 Measures
Add and subtract measures: mass, capacity, volume, time and money
Solve problems, word problems using measures.
YR3: Statistics
Read pictograms and bar charts.
Solve problems with data.
Read scales that increase by 2,5,10.

KS1

YR1/YR2 Fractions
YR1/2: work with halves and quarters.
YR1:Compare and describe a range of measures.
YR1/YR2 Measures
YR1/YR2 Shape, Movement and Direction
YR1 Know 2d/3d shapes
YR2: sort 2d shapes
YR1/2 Understand position, direction and
YR 1:X and ÷ using concrete objects/ representations
YR1/YR2:Count in multiples of: 2,5,10
YR1/YR2 Multiplication
YR2:2d+1d=
YR2: 2d+2d=
YR1:find 1 more and 1 less
YR1/YR2 Addition and
YR1:Write questions using the symbols + - =
YR1: + - numbers to
YR1/YR2 Place Value
YR1:Counting to and across 100.
YR2: count in steps of 2,3,5.
YR 1:Read,write numbers to 20
YR2: Read, write

"Those who can imagine anything, can create the impossible." Alan Turing