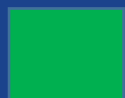




Maths Learning Map



Year	Autumn		Spring		Summer	
Nursery 1	Counting songs and recognising numbers.	Sorting and categorising Matching amounts to sets Number recognition	Matching amounts to sets, i.e. I have 5 teddy bears.	1:1 counting Number matching	Counting groups of numbers and matching to numerals	Number recognition and formation (to 10 and beyond) Numbers in a number line
Nursery 2	Language associated with "more" "lots" who has the most bears	Recognise that groups of objects change when objects are added or removed	Comparing groups of objects and recognise who has more.	Attempt to write numbers in order.	Count out irregular amounts and match number cards.	Practise counting beyond ten.
Reception	Number a week 1-5 exploring time, length and shape.	Number a week 6-10 exploring time, length and shape.	Number a week 11-16 exploring time and length.	Number a week 17-20 we will explore length and size. Making comparisons between the height of our plants and capacity of how much water our plants need.	Recognition of 3d shapes and using name appropriately during continuous provision.	Shape, time and capacity.
Year 1	Number and place value to 10. Addition and subtraction. Sequencing numbers.	Number and place value to 20. Sequencing numbers. Properties of shape.	Addition and subtraction to 20. Place value to 50. Ordering and sequencing	Place Value to 50. Counting in 2s,5s and 10s. Measurement and capacity.	Multiplication and division Fractions Position and direction	Numbers to 100 Time Money
Year 2	Numbers to 100 Addition and subtraction Money	Multiplication and division Statistics Length and Height	Properties of Shapes Fractions	Position and direction Problem solving	Time Weight, Volume and Temperature	Word problems and revision
Year 3	Number number and place value addition and subtraction multiplication and division	Number number and place value addition and subtraction multiplication and division	Measurement Statistics Fractions	Measurement Statistics Fractions	Fractions Measurement Geometry	Fractions Measurement Geometry
Year 4	Place value 4 digit numbers Addition and subtraction	Perimeter (perimeter) Multiplication and division	Multiplication and division Measure (area) Fractions	Fractions Decimals	Decimals Money Time	Statistics Geometry (angles and 2D shapes) Geometry (position and direction)
Year 5	Number and Place Value Addition and Subtraction Statistics	Multiplications and Division Measurement	Multiplication and division Number- fractions- including decimals and percentages	Number- fractions- including decimals and percentages	Number- fractions Geometry- shapes,	Geometry- position and direction Measurement
Year 6	Number: place value, addition, subtraction, multiplication and division.	Number: fractions Geometry: position and direction.	Number- fractions (including decimals and percentages) Algebra	Measurement Ratio and Proportion	Geometry Number- number and place value Statistics	Geometry Number- number and place value Statistics
Year 7	Mode, median and range Displaying data Grouping data Averages and comparing data Line graphs and charts Mental maths Addition and subtraction Multiplication Division Money and time Negative numbers Factors, multiples and primes Square numbers	Functions Simplifying expressions Writing expressions Substituting into formulae Writing formulae Decimals and rounding Length, mass and capacity Scales and measures Perimeter and area Units of measure	Comparing fractions Simplifying fractions Fractions and decimals Percentages The language of probability Calculating probability Experimental probability Expected outcomes	Direct proportion Writing ratios Using ratios Ratio, proportion and fractions Proportion and percentages	Measuring and drawing angles Lines, angles and triangles Calculating angles Angles in a triangle Quadrilaterals Sequences Pattern sequences Co-ordinates and midpoints Extending sequences Straight line graphs Position to term rules	Congruency and enlargements Symmetry Reflection Translations and combined transformations
Year 8	Calculations Division Negative numbers Multiples and factors Powers, roots and index form Area Volume	Pie charts Using tables Stem and leaf diagrams Comparing data Scattergraphs Misleading graphs Algebraic powers	Conversion graphs Distance-Time graphs Line graphs Real life graphs Curved graphs Decimals and rounding Ratio and proportion with decimals	Quadrilaterals Alternate angles and proof Angles in parallel lines Exterior and interior angles Solving geometric problems	Adding and subtracting fractions Multiplying fractions Dividing fractions Calculating with mixed numbers Direct proportion on graphs Gradients Equations of straight lines	Fractions and decimals Equivalent proportions Percentags

	2D representation of 3D shapes Surface area Measures	Expressions and brackets Factorising expressions One step equations Two step equations The balancing method				
Year 9	Indices Calculations and estimation Standard form Solving equations Substituting into expressions Writing and using formulae Using and rearranging formulae Index laws and brackets Expanding double brackets	Planning a survey Collecting data Calculating averages Displaying data Presenting and comparing data Enlargement Negative and fractional scale factors Percentage change Compound interest Direct and inverse proportion	Using scales Basic constructions Constructing triangles Using accurate scales Nth term of an arithmetic sequence non-linear sequences Inequalities Solving equations Proportion	Circumference of a circle Area of a circle Pythagoras theorem Prisms and cylinders Errors and bounds	Using $y=mx+c$ Straight line graphs Simultaneous equations Graphs of non-linear functions Quadratic graphs Mutually exclusive events Experimental and theoretical probability Sample space diagrams Venn diagrams	Congruent and similar shapes Ratios in triangles The tangent ratio The sine ratio The cosine ratio Using Trigonometry
Year 10 Foundation	Integers and place value Decimals Indices, powers and roots Factors, multiples and prime Algebra the basics Expressions Tables, charts and graphs	Pie charts Scattergraphs Fractions, decimals and percentages Equations and inequalities Tables, charts and graphs	Sequences Properties of shapes Interior and exterior angles Statistics Sampling and averages	Sampling and averages Perimeter Area Volume Real life graphs Straight line graphs	Transformations Ratio	Ratio Pythagoras Trigonometry
Year 10 Higher	Calculations, checking and rounding Indices, roots and reciprocals Factors, multiples, primes, standard form, surds Algebra the basics Sequences Averages and range	Representing, interpreting data and scattergraphs Fractions and percentages Ratio and proportion Angles, polygons and parallel lines Averages and range	Pythagoras and Trigonometry Real life graphs Straight line graphs Cubic, quadratic and other graphs	Perimeter, area and circles Volumes, cylinders and cones Accuracy and bounds Transformations Construction and loci	Solving quadratic and simultaneous equations Inequalities	Probability Multiplicative reasoning Similarity and congruence
Year 11 Foundation	Quadratic equations, expanding and factorising Plans and elevations Constructions and loci Bearings Quadratic graphs	Circles, cylinders, cones and spheres Fractions and reciprocals Indices and standard form	Similarity and congruence in 2D Vectors Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations	Revision	Revision	Exams
Year 11 Higher	Graphs of trigonometric functions Further trigonometry Collecting data Cumulative frequency, box plots and histograms	Quadratics, expanding more than two brackets, sketching graphs, graphs of circles, cubes and quadratics Circle theorems Circle geometry Changing the subject of formulae (more complex), algebraic fractions, solving equations arising from algebraic fractions, rationalising surds, proof	Vectors and geometric proof Reciprocal and exponential graphs; Gradient and area under graphs Direct and inverse proportion	Revision	Revision	Exams

Aspire for Excellence