

HeyMath! E-Lessons Programme (HELP)

CLASS 3			
Place Value	Multiplication	Measurement	Money
Game: Place values	Multiplication tables: 6, 7, 8 and 9	Measuring length	Money
Rounding numbers	Multiplying by tens and hundreds	Measurement of length	Money bag activity
Even and odd numbers	Multiplying 3 - digit numbers	Line segment	Handling Data
Game: Even and odd numbers	Multiplying 2-digit numbers	Units of length	Reading and interpreting tables
Addition	Division	Decimetres	Simple pictographs
3-digit addition	Division and multiplication together	Measuring in kilometres	Intpreting pictographs
Adding bigger numbers	More Division	Time	Reading bar graphs
Subtraction	Dividing whole numbers	Telling time	Teaching Tools
3-digit subtraction	Shape, space and patterns	Hours and minutes	Clock - Teacher tool
Subtracting bigger numbers	Solid shapes		
	Game: Number patterns		
CLASS 4			
Place Value	Division	Shapes, Space and Patterns	Area and Perimeter
Comparing numbers	Dividing a 4 digit number by a single digit number	Types of polygon	Perimeter
Rounding numbers	Factors and Multiples	Types of angles	Perimeter of compound shapes
Roman numerals	Factors	Number patterns	Area by counting squares
Building numbers	Multiples	Constructing angles with a protractor	Time
Addition and Subtraction	Even and odd numbers	Parts of a circle	Telling time
Addition with regrouping	Game: Factors	Construction of circles	24 - Hour clock
Subtraction with regrouping	Fractions	Line symmetry activity	Duration of time
Addition and subtraction of money	Equivalent fractions	Reflection	To find the finishing time
Word problems on addition and subtraction	Like and unlike fractions	Tessellation	Handling Data
Money bag activity	Comparing like fractions	Tesellation - Activity	More about bar graphs
Multiplication	Adding like fractions	Measurement	Teaching Tools
Estimating products	Subtracting like fractions	Units of length	Clock - Teacher tool
Multiplying 4 - Digit numbers	To find the fraction of a number	Line segments	
Multiplying by a 2 - Digit number	Improper fractions and mixed numbers	Measurement of mass or weight	
Multiplying by a 3-digit number	Activity on fractions		
	Word problems on fractions		

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CLASS 5			
Large Numbers	Adding unlike fractions and mixed numbers	Introducing adding and subtracting decimals	Perimeter and Area
International System	Subtracting unlike fractions and mixed numbers	Adding decimals	Perimeter of rectangle and square
Rounding	Multiplying fractions and whole numbers	Subtracting decimals	Area by counting squares
More roman numerals	Multiplying fractions by fractions	Multiplying Decimals by 10, 100 and 1000	Area of rectangle and square
Memoria	Multiplication of fractions-quiz	Multiplying decimals by a 1-digit number	Temperature
The Four Operations	Word problems on fractions (Addition and Subtraction)	Multiplying Decimals - Illustration 1	Temperature
Word problems on four operations	Dividing fractions	Multiplying Decimals - Illustration 2	Time
Factors and Multiples	Decimals	Multiplying Decimals - Illustration 3	24 - Hour Clock
Rules of divisibility	Tenths	Basics of Geometry	Addition and Subtraction of Measures of Time
Prime and Composite Numbers	Game: Monster Munch - Tenths	Basics of geometry	Finding the Starting Time or Finishing Time
Sieve of Eratosthenes	Hundredths and thousandths	Angles	Money
Prime factors	Relating fractions and decimals	Types of angles	Unitary method
Highest common factor	Converting fractions into decimals (I)	Constructing angles with a protractor	Profit and loss
Lowest common multiple	Converting fractions into decimals (II)	Parallel lines	Finding cost price or selling price
Fractions	Converting decimals to fractions	Perpendicular lines	Collecting and Representing Data
Mixed Numbers and Improper Fractions	Equivalent decimals	Geometrical Shapes	Collecting and representing data
Equivalent Fractions	Like and unlike decimals	Construction of a circle with a given radius	Teaching Tools
Simplifying fractions	Converting unlike decimals to like decimals	Circumference	Clock - Teacher tool
To find the Fraction of a Number	Ordering decimals		

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CLASS 6				
Natural numbers and whole numbers	Ratio and proportion	Decimals	Introducing linear equations in one variable	
Kaun Place Value Bataega	Introduction to ratios	Introduction to decimals	Balancing method	Parts of a circle
Factors and multiples	Dividing in a given ratio	Addition and subtraction of decimals	Solving simple equations	Constructions using ruler and compass
Sieve of Eratosthenes	Percentages and its applications	Ordering decimals	Algebra word problems	Constructing an angle bisector
Prime Factors	Profit and loss	Division of decimals	Introduction to geometry	Constructing a perpendicular bisector using compass
HCF - Division Method	Percentages, fractions and decimals	Multiplication of decimals	Basic Geometry	Constructions of special angles
Highest Common Factor	Percentage increase and decrease	Rounding off decimals	Angles	Drawing a perpendicular to a line
Lowest Common Multiple	Percentages - Fun and games	Significant figures	Naming and Measuring Angles	More constructions using ruler and compass
Tests of Divisibility	Percentages - word problems	Significant figures	Constructing angles	Area and perimeter of compound shapes
Properties of divisibility	Fractions	Introduction to algebra	Pairs of Angles	Perimeter of a compound shape
Integers	Introduction to fractions	Introduction to algebra	Introduction to parallel lines	Areas of rectangular paths
BODMAS	Ordering fractions	Algebraic terms	Introduction to parallel lines	Enrichment
Practical use of negative numbers	Improper fraction and mixed numbers	Expansion distributive law	Constructing parallel lines	Pigeon - hole principle
Absolute value of an integer	Multiplication of fractions	Evaluating algebraic expressions	Triangles	Tessellating shapes
Adding and subtracting integers (1)	Addition and subtraction of fractions	Writing algebraic expressions	Types of triangles	Pictograph
Adding and subtracting integers (2)	Division of fractions		Sum of angles of a triangle	
Multiplication and Division of Integers	Fractions - problem solving			

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CLASS 7				
Rational numbers	Solving simple linear equations	Discount	Perimeter and area	Set theory
Introduction to Rational Numbers	Algebra word problems	Discount	Areas of rectangular paths	Introduction to Sets
Recurring decimals	Solving simple equations	Simple interest	Area of triangle	Drawing Venn diagram
Squares and square roots	Balancing method	Simple interest	Area of a parallelogram	Problems using Venn diagrams
Squares and square roots	Time and work	Triangles and its properties	Circumference of a circle	Enrichment
Cubes and cube roots	Time and work	Types of triangles	Area of a circle	Stem and leaf diagram
Cubes and cube roots	Time and distance	Constructing triangles	Representing 3D in 2D	Properties of quadrilaterals
Exponents	Time and distance	Pythagoras theorem	Nets of cubes	Gauss' Law - Summing integers
Laws of Exponents	Relative speed	Pythagoras theorem - demo	Nets of Prisms	Triangular numbers
Zero, negative exponents and radicals	Relative speed	Diagonal of a cuboid	Nets of Pyramids	Fibonacci sequence
Standard form of a number (scientific notation of a number)	Percentage and its applications	Congruence of triangles	Nets of tetrahedron	Number patterns
Standard form	Percentage increase and decrease	Congruence of triangles	Visual Estimation	Numbers in different bases
Algebraic expressions	Percentages, fractions and decimals	Centroid, Orthocentre, Incentre and Circumcentre of a triangle	Data handling	Pascals triangle
Changing subject of formula	Percentages - Fun and games	Construction of Incircle and Circumcircle	Median and Mode	Calculating probability
Distributive Law	Percentages - word problems	Concurrent lines	Different measures of average	Understanding Sample space
Adding and subtracting polynomials	Profit and loss	Symmetry	Bar chart	Volume and surface area of cube and cuboids
Algebra and formulae	Profit and loss	Line of Symmetry	Introduction to Histograms	Volume and surface area of cube and cuboid
		Rotational Symmetry	Probability	Conversion of units
		Symmetry Quiz	Introduction to Probability	Volume of a prism - counting cubes method
				Volume of a cuboid

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CLASS 8				
Rational numbers	Algebraic identities	Congruence	Volume and surface area	Probability
Introduction to Rational Numbers	Expansion distributive law	Congruence	Volume and surface area of cube and cuboids	Introduction to Probability
Definition of rational and irrational	Identities revision	Special types of quadrilaterals	Volume of a prism - counting cubes	Calculating Probability
Playing with numbers	Expansion of $(a + b)^2$	Properties of quadrilaterals	Volume of a cuboid	Possibility diagram
Tests of divisibility	Expansion of $(a - b)^2$	Testing diagonal properties	Volume and surface area of cube and cuboid	Tree diagram
Properties of divisibility	Expansion of $a^2 - b^2$	Sum of angles of a quadrilateral	Conversion of units	Introduction to graphs
Squares and square roots	Expansion of $(a + b + c)^2$	Construction of quadrilaterals	Volume and surface area of cylinder	Cartesian coordinates
Squares and square roots	Expansion of $(a - b)^3$	Constructing a rectangle	Volume of prism and cylinder	Plotting straight lines and scales
Cubes and cube roots	Expansion of $(a + b)^3$	Constructing quadrilaterals	Volume of hollow cylinder	Time and Distance
Cubes and cube roots	Special products	Constructing rhombus	Volume of a liquid in a cylinder	Enrichment
Exponents and radicals	Algebraic expressions	Construction examples (polygons)	Surface area of a cylinder	Operations on inequalities
Laws of Exponents	Algebraic terms	Circles	Symmetry	Solving inequalities
Zero, negative exponents and	Adding and subtracting polynomials	Angle at the centre = 2 x angle at the	Symmetry	Further inequalities
Laws of exponents - problems	Multiplying polynomials	Perpendicular bisecting chord	Planes of symmetry	Triangle inequalities - examples
Problem solving using exponents	Dividing polynomials	Equal chords are equidistant from the	Line symmetry	Probability with Replacement
Solving exponential equations	Factorisation of algebraic expressions	Cyclic quadrilaterals	Rotational symmetry	Probability - Worked examples
Profit, loss and discount	Factorisation by grouping	Representing 3D in 2D	Symmetry quiz	
Profit and loss	Factorising polynomials	Tetrahedron, octahedron and Euler's	Data handling	
Discount	Factorising quadratics	Prisms and Pyramids	Presentation of data	
Sales Tax	Equations in one variable	Areas	Bar graph	
	Equations involving algebraic fractions	Area of triangles	Histogram	
Simple and compound interest	Algebra word problems	Area of quadrilaterals	Histogram of equal width	
Simple interest	Simultaneous equations	Area of a parallelogram	Pie chart	
Compound interest	Simultaneous linear equations	Area of a trapezium	Mean	
Direct and inverse variations	Parallel lines	Area of a kite	Calculating mean from frequency table	
Direct Variation	Angles in parallel lines	Area of a circle		
Inverse Variation	Midpoint theorem			
Joint Variation	Intercept theorem			
Time and work				
Time and distance				

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CLASS 9				
Number system	Lines and angles	Geometrical constructions	Enrichment	Enrichment
Real numbers and their decimal expansions	Angles and line quiz	Basic constructions	Volume of a square based pyramid	Introduction to bearings
Definition of rational and irrational	Linear Pair Axiom	Construction of triangles	Tetrahedron, octahedron and Euler's	Dot diagram
Operation on real numbers	Vertically opposite angles	Heron's formula	Volume & surface area of cubes &	Conversion graphs
Laws of exponents for Real numbers	FUZ angles	Heron's Formula	Volume of a prism and cylinder	Understanding sample space
Laws of Exponents	Triangles	Trigonometry	Triangular based pyramids	Ratio and Proportion
Zero, negative exponents and radicals	Angle properties of a triangle	Introduction to trig ratios	Volume and surface areas of a right triangular prism	Introduction to Ratio
Laws of exponents - problems	Sum of angles of a triangle	Trig ratios of special angles	Total surface area of a prism	Ratio examples
Problem solving using exponents	Congruence of triangles	Secant, cosecant and cotangent	Total surface area of a pyramid	Proportion
Significant figures	Inequalities in a triangle	Mensuration of plane figures	Volume of a pyramid	Banking
Difference between rounding to s.f and rounding to d.p	Sum of any two sides of a triangle	Area of a parallelogram	Statistics	Banking
Significant figures	Triangle inequalities - examples	Area of a trapezium	Histogram and frequency polygon	Presentation of data
Percentage and its application	Sides and angles of a triangle	Area of a kite	Mean	Line graph
Discount	Similarity	Length of an arc	Mean from a frequency table	Bar chart
Profit and loss	Similarity	Area of a sector	Mean, median and mode	Locus
Sales Tax	Quadrilaterals	Area of a segment	Median and mode	Introduction to locus
Cost of living index	Mid point theorem	Surface areas and volumes	Properties of mean, median and	Orbits and Locus
Percentages - more word problems	Intercept theorem	Volume & surface area of a cylinder	Different measures of average	Circles and Locus - examples
Polynomials	Parallelogram - theorem	Volume of prism and cylinder	Cumulative frequency	Equidistant from a line
Remainder theorem	Properties of a parallelogram	Volume of hollow cylinder	Probability	Equidistant from two points
Factor theorem	Properties of quadrilaterals	Volume of liquid in a cylinder	Possibility diagram	Equidistant from a line segment
Factorising cubics	Testing diagonal properties	Surface area of cylinder	Probability - Worked examples	Equidistant from two lines
Factorisation of Polynomials	Areas of parallelograms and triangles	Volume and surface area of a cone	Logarithms	Equidistant from a point
Dividing polynomials	Areas	Volume of a cone	Logarithms	Concurrent lines
Coordinate geometry	Circles	Curved surface area of a cone	Introduction to logarithms	Enrichment
Plotting a point in the plane	Circle through three points	Total surface area of a cone	Laws of logarithms	Locus - Worksheet
Linear equations in two variables	Angle subtended by an arc of a circle	Volume & surface area of a sphere	Solving logarithmic equations	Intersecting loci - Worksheet
Graph of linear equations	Cyclic quadrilaterals	Volume of a sphere	Modelling	
Algebra	Circles and its related terms	Surface area of a sphere	Exponents	
Changing the subject of the formula - 1	Angle subtended by a chord at a point			
Changing the subject of the formula - 2	Perpendicular from the centre to a chord			
Evaluating algebraic expressions				
Factorising quadratics				

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CLASS 10				
Real Numbers	Arithmetic progressions	Circles	Surface areas and volumes	Locus
Prime Factors	Arithmetic progressions	Parts of circle	Combination of solids	Introduction to locus
Highest Common Factor	Triangles	Properties of chords	Conversion of solids	Orbits and Locus
HCF - Division Method	Similarity	Angle at the centre = 2 x angle at the circumference	Curved surface area of a cone	Circles and Locus - examples
Lowest Common Multiple	Area and volume of similar figures	Perpendicular bisecting chord	Total surface area of a cone	Equidistant from a line
Definition of rational and irrational numbers	Basic proportionality theorem	Only one circle through three non-collinear points	Surface area of a sphere	Equidistant from two points
Recurring decimals	Riders in Similarity	Cyclic quadrilaterals	Volume of a cone	Equidistant from a line segment
Polynomials	Pythagoras' theorem	Geometrical constructions	Volume of a sphere	Equidistant from two lines
Dividing polynomials	Coordinate geometry	Constructing tangents to a circle	Statistics	Equidistant from a point
Zeros of quadratic functions	Length of a line segment	Constructing incircle and circumcircle	Pie chart	Concurrent lines
Sum and product of roots	Section formula	Constructions - harder examples	Mean from frequency table	Ratio and Proportion
Pair of linear equations in two variables	Mid point of a line segment	Areas related to Circles	Assumed mean	Introduction to Ratio
Simultaneous linear equations	Gradient of a straight line	Introduction to circles	Median	Ratio examples
Solving simultaneous linear equations graphically	Collinearity	Circumference of a circle	Cumulative frequency	Proportion
Problem solving using simultaneous linear equations	Introduction to trigonometry	Area of a circle	Probability	Banking
Quadratic equations	Introduction to trig ratios	Length of an arc	Understanding of sample space	Banking
Solving quadratics by factorisation	Trig ratios of special angles	Area of a sector	Possibility diagram	Income tax
Completing the square	Trig ratios of complementary angles	Area of a segment	Tree diagram	Income tax
Quadratic formula	Trigonometric identities	Tangents to a circle	Probability with Replacement	Enrichment
Quadratic word problems	Secant, cosecant and cotangent	Tangents to a circle	Probability - Worked examples	Three dimensional problems
Nature of roots of a quadratic equation	Some Applications of Trigonometry	Properties of tangents	Instalments	Introduction to geometric sequences
Quadratic graphs	Angle of elevation	Chords of a circle intersecting in a point	Instalments	Introduction to Probability
Introduction to quadratics	Angle of elevation - interactive	Common tangents to two circles	Mathematical Reasoning	Calculating Probability
Completing the square activity	Angle of depression	Alternate segment and its angles	Mathematical Reasoning 1	HCF and LCM of polynomials
Turning points of a quadratic curve	Angle of depression - interactive		Mathematical Reasoning 2	HCF of polynomials
Discriminant activity			Relations : Ordered pairs	LCM of polynomials
			Relations : Ordered pairs	Rational expressions
				Rational Expressions
				Adding and subtracting Rational Expressions
				Multiplying and dividing Rational Expressions