

Individual Topics

Below is a list of all of the available topics and links.

YOU MUST LOG IN TO www.teachusmaths.com FIRST TO BE ABLE TO ACCESS THE 'LESSON' AND 'WORKSHEET' LINKS

NUMBER

INTEGERS			
N 1.1 Adding Integers	Lesson	Worksheet	Video
N 1.2 Subtracting Integers	Lesson	Worksheet	Video
N 1.3 Multiplying Integers	Lesson	Worksheet	Video
N 1.4 Dividing Integers	Lesson	Worksheet	Video
N 1.5 Order of Operations	Lesson	Worksheet	Video
N 1.6 Prime Numbers & Prime Factor Decomposition	Lesson	Worksheet	Video
N 1.7 Factors & Highest Common Factor (HCF)	Lesson	Worksheet	Video
N 1.8 Multiples & Lowest Common Multiple (LCM)	Lesson	Worksheet	Video
NEGATIVE NUMBERS			
N 2.1 Adding & Subtracting Negative Numbers	Lesson	Worksheet	Video
N 2.2 Multiplying & Dividing Negative Numbers	Lesson	Worksheet	Video
DECIMALS			
N 3.1 Place Value & Ordering Decimals	Lesson	Worksheet	Video
N 3.2 Multiplying & Dividing by 10, 100, 1000	Lesson	Worksheet	Video
N 3.3 Adding & Subtracting Decimals	Lesson	Worksheet	Video
N 3.4 Multiplying Decimals	Lesson	Worksheet	Video
N 3.5 Dividing Decimals	Lesson	Worksheet	Video
N 3.6 Related Calculations	Lesson	Worksheet	Video
FRACTIONS			
N 4.1 Equivalent Fractions	Lesson	Worksheet	Video
N 4.2 Mixed Numbers & Improper Fractions	Lesson	Worksheet	Video
N 4.3 Ordering Fractions	Lesson	Worksheet	Video
N 4.4 Adding & Subtracting Fractions	Lesson	Worksheet	Video
N 4.5 Multiplying Fractions	Lesson	Worksheet	Video
N 4.6 Dividing Fractions	Lesson	Worksheet	Video

N 4.7 Fractions of an Amount	Lesson	Worksheet	Video
FRACTIONS, DECIMALS & PERCENTAGES			
N 5.1 Converting between Fractions, Decimals & Percentages	Lesson	Worksheet	Video
N 5.2 Ordering Fractions, Decimals & Percentages	Lesson	Worksheet	Video
N 5.3 Recurring Decimals	Lesson	Worksheet	Video
PERCENTAGES			
N 6.1 Expressing One Quantity as a Percentage of Another	Lesson	Worksheet	Video
N 6.2 Percentages of an Amount (Non - Calculator)	Lesson	Worksheet	Video
N 6.3 Percentages of an Amount (Calculator)	Lesson	Worksheet	Video
N 6.4 Percentage Increase / Decrease	Lesson	Worksheet	Video
N 6.5 Percentage Change	Lesson	Worksheet	Video
N 6.6 Reverse Percentages	Lesson	Worksheet	Video
N 6.7 Compound Interest	Lesson	Worksheet	Video
ROUNDING			
N 7.1 Rounding - Nearest 10, 100, 1000	Lesson	Worksheet	Video
N 7.2 Rounding - Nearest Whole Number & Decimal Places	Lesson	Worksheet	Video
N 7.3 Rounding - Significant Figures	Lesson	Worksheet	Video
N 7.4 Truncating	Lesson	Worksheet	Video
N 7.5 Estimation	Lesson	Worksheet	Video
N 7.6 Error Intervals	Lesson	Worksheet	Video
N 7.7 Calculating with Upper & Lower Bounds	Lesson	Worksheet	Video
INDICES			
N 8.1 Indices - Squares, Cubes & Powers	Lesson	Worksheet	Video
N 8.2 Laws of Indices	Lesson	Worksheet	Video
N 8.3 Fractional Indices	Lesson	Worksheet	Video
STANDARD FORM			
N 9.1 Standard Form	Lesson	Worksheet	Video
N 9.2 Calculating with Standard Form	Lesson	Worksheet	Video
SURDS			
N 10.1 Surds	Lesson	Worksheet	Video
N 10.2 Rationalising the Denominator	Lesson	Worksheet	Video
CALCULATIONS			
N 11.1 Using a Calculator	Lesson	Worksheet	Video
N 11.2 Time	Lesson	Worksheet	Video
N 11.3 Money	Lesson	Worksheet	Video
N 11.4 Exchange Rates	Lesson	Worksheet	Video

RATIO, PROPORTION & RATES OF CHANGE

RATIO			
R 1.1 Introduction to Ratio	Lesson	Worksheet	Video
R 1.2 Simplifying Ratio	Lesson	Worksheet	Video
R 1.3 Sharing in a Ratio	Lesson	Worksheet	Video
R 1.4 Ratio Problems	Lesson	Worksheet	Video
PROPORTION			
R 2.1 Introduction to Proportion	Lesson	Worksheet	Video
R 2.2 Direct & Inverse Proportion	Lesson	Worksheet	Video
R 2.3 Direct Proportion (Algebra)	Lesson	Worksheet	Video
R 2.4 Inverse Proportion (Algebra)	Lesson	Worksheet	Video
COMPOUND MEASURES			
R 3.1 Speed	Lesson	Worksheet	Video
R 3.2 Density	Lesson	Worksheet	Video
R 3.3 Pressure	Lesson	Worksheet	Video
REAL-LIFE GRAPHS			
R 4.1 Conversion Graphs	Lesson	Worksheet	Video
R 4.2 Other Real-Life Graphs	Lesson	Worksheet	Video
R 4.3 Distance-Time Graphs	Lesson	Worksheet	Video
R 4.4 Speed-Time Graphs (Straight Lines)	Lesson	Worksheet	Video
R 4.5 Speed-Time Graphs (Curves)	Lesson	Worksheet	Video

ALGEBRA

CO-ORDINATES			
A 1.1 Co-ordinates	Lesson	Worksheet	Video
A 1.2 Midpoint of a Line	Lesson	Worksheet	Video
A 1.3 3D Co-ordinates	Lesson	Worksheet	Video
LINEAR GRAPHS			
A 2.1 $x = a$, $y = b$ Graphs	Lesson	Worksheet	Video
A 2.2 Plotting Linear Graphs ($y = mx + c$)	Lesson	Worksheet	Video
A 2.3 Equations of Linear Graphs ($y = mx + c$)	Lesson	Worksheet	Video
A 2.4 Using $y = mx + c$ to Draw Linear Graphs	Lesson	Worksheet	Video
A 2.5 Using $y = mx + c$ to Solve Problems	Lesson	Worksheet	Video
A 2.6 Using Gradients and Co-ordinates to find $y = mx + c$	Lesson	Worksheet	Video
A 2.7 Parallel & Perpendicular Lines	Lesson	Worksheet	Video

ALGEBRA			
A 3.1 Algebraic Notation	Lesson	Worksheet	Video
A 3.2 Collecting Like Terms	Lesson	Worksheet	Video
A 3.3 Multiplying Terms	Lesson	Worksheet	Video
A 3.4 Dividing Terms	Lesson	Worksheet	Video
A 3.5 Expanding Single Brackets	Lesson	Worksheet	Video
A 3.6 Factorising into Single Brackets	Lesson	Worksheet	Video
A 3.7 Laws of Indices (Algebra)	Lesson	Worksheet	Video
A 3.8 Function Machines	Lesson	Worksheet	Video
A 3.9 Substitution	Lesson	Worksheet	Video
A 3.10 Solving Linear Equations	Lesson	Worksheet	Video
A 3.11 Solving Linear Equations (with the unknown on both sides)	Lesson	Worksheet	Video
A 3.12 Changing the Subject	Lesson	Worksheet	Video
A 3.13 Changing the Subject (Advanced)	Lesson	Worksheet	Video
QUADRATICS			
A 4.1 Expanding Double Brackets	Lesson	Worksheet	Video
A 4.2 Factorising Quadratics	Lesson	Worksheet	Video
A 4.3 Factorising Quadratics (Advanced)	Lesson	Worksheet	Video
A 4.4 Completing the Square	Lesson	Worksheet	Video
A 4.5 Plotting Quadratic Graphs	Lesson	Worksheet	Video
A 4.6 Solving Quadratics - Graphically	Lesson	Worksheet	Video
A 4.7 Solving Quadratics - Graphically (Advanced)	Lesson	Worksheet	Video
A 4.8 Solving Quadratics - Factorising	Lesson	Worksheet	Video
A 4.9 Solving Quadratics - Factorising (Advanced)	Lesson	Worksheet	Video
A 4.10 Solving Quadratics - Quadratic Formula	Lesson	Worksheet	Video
A 4.11 Solving Quadratics - Completing the Square	Lesson	Worksheet	Video
A 4.12 Solving Quadratics - All Methods	Lesson	Worksheet	Video
A 4.13 Sketching Quadratic Graphs	Lesson	Worksheet	Video
CUBICS			
A 5.1 Expanding Triple Brackets	Lesson	Worksheet	Video
A 5.2 Cubic Graphs	Lesson	Worksheet	Video
OTHER GRAPHS			
A 6.1 Reciprocal Graphs	Lesson	Worksheet	Video
A 6.2 Exponential Graphs	Lesson	Worksheet	Video
A 6.3 Equations of Tangents to Circles	Lesson	Worksheet	Video
A 6.4 Trigonometric Graphs	Lesson	Worksheet	Video

A 6.5 Transformations of Graphs	Lesson	Worksheet	Video
INEQUALITIES			
A 7.1 Inequalities on a Number Line	Lesson	Worksheet	Video
A 7.2 Solving Linear Inequalities	Lesson	Worksheet	Video
A 7.3 Solving Linear Inequalities Graphically	Lesson	Worksheet	Video
A 7.4 Solving Quadratic Inequalities	Lesson	Worksheet	Video
ITERATION			
A 8.1 Trial & Improvement	Lesson	Worksheet	Video
A 8.2 Iteration	Lesson	Worksheet	Video
SIMULTANEOUS EQUATIONS			
A 9.1 Simultaneous Equations - Linear	Lesson	Worksheet	Video
A 9.2 Simultaneous Equations – Non-Linear	Lesson	Worksheet	Video
SEQUENCES			
A 10.1 Linear Sequences	Lesson	Worksheet	Video
A 10.2 Quadratic Sequences	Lesson	Worksheet	Video
A 10.3 Geometric & Fibonacci Sequences	Lesson	Worksheet	Video
ALGEBRAIC FRACTIONS			
A 11.1 Algebraic Fractions - Simplify	Lesson	Worksheet	Video
A 11.2 Algebraic Fractions - Add/Subtract	Lesson	Worksheet	Video
A 11.3 Algebraic Fractions - Multiply/Divide	Lesson	Worksheet	Video
FUNCTIONS			
A 12.1 Functions	Lesson	Worksheet	Video
PROOF			
A 13.1 Algebraic Proof	Lesson	Worksheet	Video

GEOMETRY

SHAPES			
G 1.1 2D Shapes - Properties	Lesson	Worksheet	Video
G 1.2 Symmetry	Lesson	Worksheet	Video
G 1.3 3D Shapes - Properties	Lesson	Worksheet	Video
G 1.4 Plans & Elevations	Lesson	Worksheet	Video
PERIMETER & AREA			
G 2.1 Perimeter	Lesson	Worksheet	Video
G 2.2 Area of Rectangles	Lesson	Worksheet	Video
G 2.3 Area of Parallelograms	Lesson	Worksheet	Video

G 2.4 Area of Triangles	Lesson	Worksheet	Video
G 2.5 Area of Trapezia	Lesson	Worksheet	Video
CIRCLES			
G 3.1 Circumference	Lesson	Worksheet	Video
G 3.2 Arc Length	Lesson	Worksheet	Video
G 3.3 Area of Circles	Lesson	Worksheet	Video
G 3.4 Area of Sectors	Lesson	Worksheet	Video
SURFACE AREA & VOLUME			
G 4.1 Surface Area - Prisms & Cylinders	Lesson	Worksheet	Video
G 4.2 Surface Area – Spheres, Pyramids & Cones	Lesson	Worksheet	Video
G 4.3 Volume - Prisms & Cylinders	Lesson	Worksheet	Video
G 4.4 Volume – Spheres, Pyramids & Cones	Lesson	Worksheet	Video
UNITS			
G 5.1 Reading Scales	Lesson	Worksheet	Video
G 5.2 Converting Metric Units	Lesson	Worksheet	Video
G 5.3 Converting Units - Area/Volume	Lesson	Worksheet	Video
ANGLES			
G 6.1 Angles - Types, Measure & Draw	Lesson	Worksheet	Video
G 6.2 Calculating Angles - Straight Lines & Full Turns	Lesson	Worksheet	Video
G 6.3 Calculating Angles - Parallel Lines	Lesson	Worksheet	Video
G 6.4 Calculating Angles - Triangles	Lesson	Worksheet	Video
G 6.5 Calculating Angles - Polygons	Lesson	Worksheet	Video
G 6.6 Bearings	Lesson	Worksheet	Video
CONSTRUCTIONS			
G 7.1 Perpendicular Bisector & Angle Bisector	Lesson	Worksheet	Video
G 7.2 Loci	Lesson	Worksheet	Video
G 7.3 Constructing Triangles	Lesson	Worksheet	Video
CONGRUENCE & SIMILARITY			
G 8.1 Congruence	Lesson	Worksheet	Video
G 8.2 Similarity	Lesson	Worksheet	Video
TRANSFORMATIONS			
G 9.1 Reflection	Lesson	Worksheet	Video
G 9.2 Rotation	Lesson	Worksheet	Video
G 9.3 Translation	Lesson	Worksheet	Video
G 9.4 Enlargement	Lesson	Worksheet	Video
G 9.5 Enlargement (Negative Scale Factors)	Lesson	Worksheet	Video

PYTHAGORAS & TRIGONOMETRY			
G 10.1 Pythagoras' Theorem	Lesson	Worksheet	Video
G 10.2 Trigonometry – Introduction	Lesson	Worksheet	Video
G 10.3 Trigonometry – Further	Lesson	Worksheet	Video
G 10.4 Trigonometry - Exact Values	Lesson	Worksheet	Video
G 10.5 Sine Rule	Lesson	Worksheet	Video
G 10.6 Cosine Rule	Lesson	Worksheet	Video
G 10.7 Area of a Triangle	Lesson	Worksheet	Video
VECTORS			
G 11.1 Vectors	Lesson	Worksheet	Video
CIRCLE THEOREMS			
G 12.1 Circle Theorems	Lesson	Worksheet	Video
G 12.2 Further Circle Theorems	Lesson	Worksheet	Video

STATISTICS

DATA COLLECTION			
S 1.1 The Data Handling Cycle & Questionnaires	Lesson	Worksheet	Video
S 1.2 Sampling & Capture, Recapture	Lesson	Worksheet	Video
S 1.3 Types of Data	Lesson	Worksheet	Video
S 1.4 Tally Charts	Lesson	Worksheet	Video
S 1.5 Two - Way Tables	Lesson	Worksheet	Video
AVERAGES			
S 2.1 Mean, Median, Mode, Range	Lesson	Worksheet	Video
S 2.2 Averages from a Table	Lesson	Worksheet	Video
CHARTS & GRAPHS			
S 3.1 Pictograms & Bar Charts	Lesson	Worksheet	Video
S 3.2 Pie Charts	Lesson	Worksheet	Video
S 3.3 Stem & Leaf Diagrams	Lesson	Worksheet	Video
S 3.4 Frequency Polygons	Lesson	Worksheet	Video
S 3.5 Time Series	Lesson	Worksheet	Video
S 3.6 Scatter Graphs	Lesson	Worksheet	Video
S 3.7 Cumulative Frequency Diagrams	Lesson	Worksheet	Video
S 3.8 Box Plots	Lesson	Worksheet	Video
S 3.9 Histograms	Lesson	Worksheet	Video

PROBABILITY

PROBABILITY			
P 1.1 Basic Probability	Lesson	Worksheet	Video
P 1.2 Relative Frequency	Lesson	Worksheet	Video
COMBINED PROBABILITY			
P 2.1 Listing Outcomes, Sample Spaces & Frequency Trees	Lesson	Worksheet	Video
P 2.2 Tree Diagrams	Lesson	Worksheet	Video
P 2.3 Venn Diagrams	Lesson	Worksheet	Video
P 2.4 Product Rule for Counting	Lesson	Worksheet	Video