

# Maths Workout - Success Chart

Number						
Topic	Target 1	Target 2	Target 3	Target 4	Target 5	
1	Arithmetic	Adding	Subtraction	Multiplication	Dividing	Arithmetic
2	Money	Adding coins	Cost/change	Coin total	Calculating Change	Money Problems
3	Time	Converting mins/secs	Converting hours/mins	Converting dec/fract times	Time Durations	Journey/Duration
4	Place Value	Write as words	Place value	Ordering	$\times, \div 10, 100, 1000$	puzzle
5	Decimals	Add/subtract	X decimals	X decimals	Decimal x decimal	$\div$ decimals
6	Integers (Negative Numbers)	Temperature	Ordering negatives	Temp change	Add/subtract negatives	$+ - \times \div$ (decimals)
7	Factors	Factors	Factors	HCF	HCF Venn Diagrams	Puzzles
8	Primes	Prime Numbers	Factor Trees	Product of Primes	-	-
9	Multiples	Multiples	Multiples	Multiples	Common Multiples	LCM
10	Powers	Square numbers	Square roots	Cube numbers	Cube Roots	Expanding Powers
11	Order of Operations	Simple BODMAS	BODMAS (brackets/powers)	BODMAS (mixture)	-	-
12	Rounding & Estimation	Exact or approx	Whole, 10, 100, 1000 rounding	Decimal places	Significant figures	Estimate by rounding
13	Number Machines	Simple Number Machines	Missing Values	Negatives	Negatives	Mixture
14	Number Problems and Puzzles	Bingo	Magic Squares	Number Puzzles	Number Puzzles	Number Problems
15	Language Tasks & Quiz 1	Maths Language	Wordsearch	Crossword	Fill in blanks	Quiz
16	Using a Calculator	Decimal work	More decimals	Word problems	several operations	more operations (incl. roots, fract, etc)
17	Fractions 1	Fractions of shapes	Equivalent Fracs	Simplest Form	Improper (Top Heavy)/mixed	Calculations
18	Fractions 2	Frac & Decs	Recurring Decs	Adding	Subtracting	Mult & Divide
19	Percentages 1	Frac/Decs/Percentages	% of shapes	Calculations NC	Calculations C	Simple Interest
20	Percentages 2	As a percentage of	% Increase	% Change	Reverse	Compound Interest
21	Ratio	Simplifying	Ratios in shapes	Divide into a ratio	Mixed Questions	Maps
22	Proportion	Direct	Graphs of direct	Indirect	Rates & Best Buys	Conversion Rates
23	Indices 1	Write in index form	Reciprocal	Indices/Roots	Rules	More Rules
24	Surds 1	Square Numbers	Simplifying Surds	Simplifying Surds	$+/-$ surds	Expanding Brackets
25	Surds 2	Simplifying Surds	Rationalising the Denominator	Simplifying	More Simplifying	Conjugate
26	Standard Form	positive indices	negative indices	more negatives	$\times$ & $\div$ calculations	$+$ & $-$ calculations
27	Language Tasks & Quizzes 2	Maths Language	Wordsearch	Crossword	Complete sentence	Quiz
Geometry & Measures						
Topic	Target 1	Target 2	Target 3	Target 4	Target 5	
1	Measurement 1	Reading a scale in cm to 1 dp	Using a ruler to measure in cm to 1 dp	Scales finding missing values	Reading Linear Scales	Reading Circular Scales
2	Measurement 2	Units & symbols used	Converting metric units of length	Converting metric units of mass	Imperial & metric unit conversions	Tolerance upper & lower bounds
3	Line Symmetry	Vertical & horizontal simple patterns	Vertical & horizontal harder patterns	Shapes with lines & dots	Recognising lines of symm in shapes	Recognising lines of symm in shapes
4	Rotational Symmetry	Order of rotational symmetry	Order of rotational symmetry	Complete Patterns (order 2)	Order 2,3,4,6 Patterns	-
5	Plane Symmetry	Recognising Plane Symmetry	No. of Planes of Symmetry	No. of Planes of Symmetry	-	-
6	Shapes	Properties of 2D shapes	Identifying Shapes	Quiz	-	-
7	Solids	Identifying Solids	Edges, Vertices, Faces	Edges, Vertices, Faces	Edges, Vertices, Faces	Nets of Solids
8	Angles	Types & estimating	Straight & around a point	Triangle & quadrilateral	Alternate & Corresponding	-
9	Angles in a Polygon	External Angles	Ext/Int Angles	Mixture	-	-
10	Perimeter	Perimeters	Circles	-	-	-
11	Area	Estimating Area	Rectangles	Triangles	Circles	Quadrilaterals
12	Capacity & Volume	Changing units	Reading scales (liquids)	Volume (counting cubes)	Volume of Cuboids	capacity
13	Volume	Compound volumes	V of prisms	V of Cylinders	Cones, Spheres, etc	-
14	Surface Area	Cube/Cuboid	Cylinder	Cone	Compound Shapes	-

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15	Language Tasks & Quizzes 1	Maths Language	Wordsearch	Crossword	Missing words	Quiz
16	Scale Drawings	Angle of elevation/depression	Map Scales	3 fig bearings/ scale drawing	Drawing bearings/problems	Constructing a Triangle
17	Loci	Draw Loci	Draw Loci	Locus Problems	-	-
18	Speed, Distance & Time	Time intervals/DST	D/T graphs	D/T graphs	Draw D/T graphs	Draw D/T graphs
19	Transformations 1	Reflection	Draw Reflection	Translation	Rotation	Enlargement
20	Transformations 2	Reflection in a line(equation)	Translation (vectors)	Rotation around a point	Enlargement S.F	Fraction/Negative S.F
21	Similarity	Congruent/similar shapes	Similar triangles(missingsides)	Linear,Area S.F	Volume S.F	Similar Volumes
22	Pythagoras	Investigation	Calc hypotenuse	Calc short side	Mixture (incl. area)	3D Pythagoras
23	Trigonometry 1	Identify O,A,H	Calculate angle	Calculate side	Side (x on denominator)	Mixture
24	Trigonometry 2	Mixed soh/cah/toa	$A = \frac{1}{2}ab\sin C$	Sine rule	Cosine rule	Mixed
25	Circle Geometry	Circumference	Area	Arc/Sector	Angle in semicircle	Tangent/radius/mixed
26	Language Tasks & Quizzes 2	Maths Language	Wordsearch	Crossword	Fill in missing words	Quiz

Statistics and Probability						
Topic		Target 1	Target 2	Target 3	Target 4	Target 5
1	Tables & Diagrams 1	Two-way tables	Distance Tables	Venn Diagrams	Venn Diagrams	Tables(12hr )
2	Tables & Diagrams 2	Tables(24hr )	Train timetables (12hr)	Train Timetables (24 hr)	Calendars	Prices/Temp tables
3	Mean, Median, Mode & Range	Mode	Median	Mode	Range	3averages&range
4	Pictograms	Pictogram(read)	Pictogram(read)	Pictogram (draw)	Pictogram (draw)	-
5	Bar Charts	Interpret Bar Chart	Draw Simple Bar Chart	Draw	Comparative Bar Chart	Back to Back
6	Line Graphs	Distance/Time graph	Line Graph	Trends	Conversion Graphs	Moving Averages
7	Scatter Graphs	Correlation	Draw	Line of Best Fit	-	-
8	Pie Charts	Simplify Fractions	Pie Charts (protractor)	Pie Charts Finding the angle	Pie Charts	Stem and Leaf
9	Stem & Leaf Diagrams	Construct Stem and Leaf Diagram	Find Median/Range	-	-	-
10	Introduction to Probability	Language	Simple Prob	Equivalent Prob (Frac/Dec/%)	Probability	Probability Space Diagram
11	Probability Lab	Spinner	Dice	Cards	Estimating	Listing/ Expectation
12	Language Tasks & Quizzes 1	Maths Language	Wordsearch	Crossword	Missing words	Quiz
13	Data Handling Theory	types of data	how to collect data	questionnaires & bias	sampling	descriptions, mean mode etc
14	Frequency Tables	complete tables	median from table	mean from table	grouped frequencies	mean from grouped frequency
15	Frequency Charts & Polygons	draw charts	interpret charts	mode mean from charts	frequency polygons	mode mean from polygons
16	Histograms	frequency density	construct	interpreting	interpreting	Reading & density
17	Measures of Spread 1	the range	the median	quartiles	box plots	more box plots
18	Measures of Spread 2	cumulative freq	using ogive curve	interpret ogives	box plots grouped	compare box plots
19	Probability 1	simple	Mutually exclusive	Mutual exclusivity	Addition rule	mixture
20	Probability 2	Independent events	Tree diagrams	More tree diagrams	More tree diagrams	More tree diagrams
21	Language Tasks & Quizzes 2	Language	Wordsearch	Crossword	Missing words	Quiz
Algebra & Problem Solving						
Topic		Target 1	Target 2	Target 3	Target 4	Target 5
1	Writing Algebra 1	using letters	multiplying	writing expressions	more writing expressions	even harder expressions
2	Writing Algebra 2	expressions & number machines	harder expressions	even harder expressions	brackets	algebraic fractions
3	Like Terms	collect like terms	integers	collect integers	harder ones	rock hard ones
4	Expanding Brackets	remove brackets	remove brackets 2 terms	remove brackets integers	integers and square terms	expand and simplify
5	Factorising	HCF numbers only	HCF using letters	single bracket	single bracket with powers	simplify fractions
6	Solving Equations 1	1 step with integers	2 step & 3 step	3 step with integers/brackets	Mixture	Mixture (incl. fract/brack)
7	Algebraic Modelling	What number am I thinking?	Wordy Problems	What number am I thinking?	What number am I thinking?	Mixture

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8	Substitution	bodmas & +ve integers	Substitution +ve	Substitution -ve	More difficult -ve	-
9	Formulae	Substitution (+ve)	Substitution in context	More Substitution	Wordy Problems	Wordy Problems
10	Problem Solving Theory	What is a Problem?	What does problem solving require?	How to solve problems	Useful strategies	-
11	Spotting Patterns	copy patterns	complete patterns	draw patterns	more drawing	colour patterns
12	Problems & Puzzles 1	pentominoes	matchsticks	solitaire type	0s & xs connect 4	codes
13	Language Tasks & Quizzes 1	descriptions	wordsearch	crossword	sentences	quiz
14	Sequences 1	Missing numbers	Missing Numbers	Using Rules	More Using Rules	Missing Terms
15	Sequences 2	Using the nth term rule	Finding the nth term rule	Complete Sequences	Finding nth term rule (quadratics)	Finding nth term rule (quadratics)
16	Solving Equations 2	variable both sides	harder var both	involves fractions	construct equns	trial & improve
17	Straight Lines 1	4 quadrant points	Shapes from Coords	Vert/Horiz lines	Gradient	$Y=mx+c$
18	Straight Lines 2	$Y=mx+c$	Rearranging	Midpoint	Distance Formula	Parallel/Perp
19	Simultaneous Equations	graphically	solving (no scaling)	Solving (scaling one eq)	Solving (scaling both eq)	Substitution Method
20	Changing the Subject of a Formula	Simple examples	harder examples	harder examples (incl brackets)	Examples incl square/roots	Involves factorising
21	Quadratics 1	using table to draw	more tables	More tables	More tables	Multiplying Out Brackets
22	Quadratics 2	Factorising	Solve by Factorising	Rearrange then Solve	Complete the Square	Quadratic Formula
23	Indices 2	Multiply	Multiply/Divide	Mixture	Fractional Indices	Mixture
24	Algebraic Fractions	Simplifying	Factorise then Simplify	Multiply/Divide	Add/Subtract	-
25	Inequalities	using symbols	combined	solving ineqs	Ineqs with Fractions	-
26	Proportion 2	Direct	Direct (square/cube)	Inverse	Inverse (square/cube)	-
27	Problems & Puzzles 2	gridlock	slide & hanoi	nonogram	logic puzzles	logic grid
28	Language Tasks & Quizzes 2	Maths language	wordsearch	crossword	Complete the sentences	quiz