

# Checklist (GCSE F)

Below is a list of all of the available topics and links that are relevant to GCSE Foundation.

**YOU MUST LOG IN TO [www.teachusmaths.com](http://www.teachusmaths.com) FIRST TO BE ABLE TO ACCESS THE 'LESSON' AND 'WORKSHEET' LINKS**

Each topic is also colour coded...

Green for approx. GCSE grades 1-3

Blue for approx. GCSE grades 4&5

## NUMBER

INTEGERS				☆☆☆
N 1.1 Adding Integers	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 1.2 Subtracting Integers	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 1.3 Multiplying Integers	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 1.4 Dividing Integers	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 1.5 Order of Operations	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 1.6 Prime Numbers & Prime Factor Decomposition	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 1.7 Factors & Highest Common Factor (HCF)	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 1.8 Multiples & Lowest Common Multiple (LCM)	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
NEGATIVE NUMBERS				
N 2.1 Adding & Subtracting Negative Numbers	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 2.2 Multiplying & Dividing Negative Numbers	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
DECIMALS				
N 3.1 Place Value & Ordering Decimals	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 3.2 Multiplying & Dividing by 10, 100, 1000	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 3.3 Adding & Subtracting Decimals	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 3.4 Multiplying Decimals	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 3.5 Dividing Decimals	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
N 3.6 Related Calculations	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

<b>FRACTIONS</b>				
<b>N 4.1 Equivalent Fractions</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 4.2 Mixed Numbers &amp; Improper Fractions</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 4.3 Ordering Fractions</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 4.4 Adding &amp; Subtracting Fractions</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 4.5 Multiplying Fractions</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 4.6 Dividing Fractions</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 4.7 Fractions of an Amount</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>FRACTIONS, DECIMALS &amp; PERCENTAGES</b>				
<b>N 5.1 Converting between Fractions, Decimals &amp; Percentages</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 5.2 Ordering Fractions, Decimals &amp; Percentages</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>PERCENTAGES</b>				
<b>N 6.1 Expressing One Quantity as a Percentage of Another</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 6.2 Percentages of an Amount (Non - Calculator)</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 6.3 Percentages of an Amount (Calculator)</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 6.4 Percentage Increase / Decrease</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 6.5 Percentage Change</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 6.6 Reverse Percentages</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 6.7 Compound Interest</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>ROUNDING</b>				
<b>N 7.1 Rounding - Nearest 10, 100, 1000</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 7.2 Rounding - Nearest Whole Number &amp; Decimal Places</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 7.3 Rounding - Significant Figures</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 7.4 Truncating</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 7.5 Estimation</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 7.6 Error Intervals</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>INDICES</b>				
<b>N 8.1 Indices - Squares, Cubes &amp; Powers</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 8.2 Laws of Indices</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>STANDARD FORM</b>				
<b>N 9.1 Standard Form</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 9.2 Calculating with Standard Form</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>CALCULATIONS</b>				
<b>N 11.1 Using a Calculator</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 11.2 Time</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>N 11.3 Money</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

N 11.4 Exchange Rates	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
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## RATIO, PROPORTION & RATES OF CHANGE

RATIO				☆☆☆
R 1.1 Introduction to Ratio	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 1.2 Simplifying Ratio	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 1.3 Sharing in a Ratio	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 1.4 Ratio Problems	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
PROPORTION				
R 2.1 Introduction to Proportion	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 2.2 Direct & Inverse Proportion	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
COMPOUND MEASURES				
R 3.1 Speed	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 3.2 Density	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 3.3 Pressure	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
REAL-LIFE GRAPHS				
R 4.1 Conversion Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 4.2 Other Real-Life Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
R 4.3 Distance-Time Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

## ALGEBRA

CO-ORDINATES				☆☆☆
A 1.1 Co-ordinates	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 1.2 Midpoint of a Line	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
LINEAR GRAPHS				
A 2.1 $x = a$ , $y = b$ Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 2.2 Plotting Linear Graphs ( $y = mx + c$ )	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 2.3 Equations of Linear Graphs ( $y = mx + c$ )	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 2.4 Using $y = mx + c$ to Draw Linear Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 2.5 Using $y = mx + c$ to Solve Problems	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 2.6 Using Gradients and Co-ordinates to find $y = mx + c$	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 2.7 Parallel & Perpendicular Lines * PARALLEL ONLY *	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
ALGEBRA				
A 3.1 Algebraic Notation	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

A 3.2 Collecting Like Terms	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.3 Multiplying Terms	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.4 Dividing Terms	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.5 Expanding Single Brackets	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.6 Factorising into Single Brackets	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.7 Laws of Indices (Algebra)	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.8 Function Machines	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.9 Substitution	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.10 Solving Linear Equations	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.11 Solving Linear Equations (with the unknown on both sides)	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 3.12 Changing the Subject	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
QUADRATICS				
A 4.1 Expanding Double Brackets	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 4.2 Factorising Quadratics	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 4.5 Plotting Quadratic Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 4.6 Solving Quadratics - Graphically	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 4.8 Solving Quadratics - Factorising	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
CUBICS				
A 5.2 Cubic Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
OTHER GRAPHS				
A 6.1 Reciprocal Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
INEQUALITIES				
A 7.1 Inequalities on a Number Line	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 7.2 Solving Linear Inequalities	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
SIMULTANEOUS EQUATIONS				
A 9.1 Simultaneous Equations - Linear	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
SEQUENCES				
A 10.1 Linear Sequences	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
A 10.3 Geometric & Fibonacci Sequences	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

## GEOMETRY

SHAPES				☆☆☆
G 1.1 2D Shapes - Properties	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 1.2 Symmetry	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 1.3 3D Shapes - Properties	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

G 1.4 Plans & Elevations	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>PERIMETER &amp; AREA</b>				
G 2.1 Perimeter	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 2.2 Area of Rectangles	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 2.3 Area of Parallelograms	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 2.4 Area of Triangles	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 2.5 Area of Trapezia	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>CIRCLES</b>				
G 3.1 Circumference	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 3.2 Arc Length	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 3.3 Area of Circles	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 3.4 Area of Sectors	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>SURFACE AREA &amp; VOLUME</b>				
G 4.1 Surface Area - Prisms & Cylinders	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 4.2 Surface Area – Spheres, Pyramids & Cones	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 4.3 Volume - Prisms & Cylinders	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 4.4 Volume – Spheres, Pyramids & Cones	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>UNITS</b>				
G 5.1 Reading Scales	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 5.2 Converting Metric Units	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 5.3 Converting Units - Area/Volume	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>ANGLES</b>				
G 6.1 Angles - Types, Measure & Draw	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 6.2 Calculating Angles - Straight Lines & Full Turns	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 6.3 Calculating Angles - Parallel Lines	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 6.4 Calculating Angles - Triangles	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 6.5 Calculating Angles - Polygons	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 6.6 Bearings	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>CONSTRUCTIONS</b>				
G 7.1 Perpendicular Bisector & Angle Bisector	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 7.2 Loci	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 7.3 Constructing Triangles	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>CONGRUENCE &amp; SIMILARITY</b>				
G 8.1 Congruence	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 8.2 Similarity	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>TRANSFORMATIONS</b>				

G 9.1 Reflection	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 9.2 Rotation	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 9.3 Translation	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 9.4 Enlargement	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>PYTHAGORAS &amp; TRIGONOMETRY</b>				
G 10.1 Pythagoras' Theorem	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 10.2 Trigonometry – Introduction	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 10.3 Trigonometry – Further	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
G 10.4 Trigonometry - Exact Values	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>VECTORS</b>				
G 11.1 Vectors	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

## STATISTICS

<b>DATA COLLECTION</b>				☆☆☆
S 1.1 The Data Handling Cycle & Questionnaires	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 1.2 Sampling & Capture, Recapture	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 1.3 Types of Data	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 1.4 Tally Charts	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 1.5 Two - Way Tables	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>AVERAGES</b>				
S 2.1 Mean, Median, Mode, Range	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 2.2 Averages from a Table	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>CHARTS &amp; GRAPHS</b>				
S 3.1 Pictograms & Bar Charts	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 3.2 Pie Charts	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 3.3 Stem & Leaf Diagrams	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 3.4 Frequency Polygons	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 3.5 Time Series	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
S 3.6 Scatter Graphs	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

## PROBABILITY

<b>PROBABILITY</b>				☆☆☆
P 1.1 Basic Probability	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
P 1.2 Relative Frequency	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	

<b>COMBINED PROBABILITY</b>				
<b>P 2.1 Listing Outcomes, Sample Spaces &amp; Frequency Trees</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>P 2.2 Tree Diagrams</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	
<b>P 2.3 Venn Diagrams</b>	<a href="#">Lesson</a>	<a href="#">Worksheet</a>	<a href="#">Video</a>	