

**Foundation Tier: Collated content for Paper 1F, 2F and 3F**

<b>Number (*see Ratio – some overlap of topic areas)</b>	
Arithmetic	Money
	Four operations
	Negative number
Fractions	Order fractions, decimals, percentages
	Fraction of an amount
	One amount as a fraction of another
	Fraction arithmetic
	Equivalent fractions
Properties	Place value
	Order integers
	Multiples
	Factors
	Lowest Common Multiple
	Product of prime factors
Powers and roots	Square root
Standard Form	Conversion
	Calculation
Approximation and estimation	Rounding
	Estimation
	Error interval
Other	Mathematical symbols
	Calculator use



## Algebra

Manipulation

Simplification

Expansion of bracket

Factorisation

Substitute values

Change subject of a formula

Forming an expression

Laws of indices

Equations and inequalities

Linear equation

Linear inequality

Linear simultaneous equations

Form an equation

Quadratic equation

Graphs

Coordinates

Straight line graph

Quadratic graph

Functions

Number machines

Sequences

Linear sequence

### Ratio, proportion and rates of change (\*see Number – some overlap of topic areas)

Conversion

Length, mass, time, area

Compound units

Scale drawing

Percentages	Percentage to fraction
	Decimal to percentage
	Percentage of an amount
	Percentage increase/decrease
	Percentage profit
	One quantity as a percentage of another
	Depreciation
	Reverse percentage
Ratio	Write as a ratio
	Share in a ratio
	Use of ratio
	1 : $n$ form
Proportion	Direct proportion
	Currency conversion
Compound Measures	Speed
	Average speed
	Density
<b>Geometry and measures</b>	
Shape	Triangle properties
	Quadrilaterals
	Polygons
	Triangular prism
	Circles
	Parallel and perpendicular lines
	Reflection
	Transformations
	Plan and elevation

Angles	Angles in a triangle
	Vertically opposite angles
	Angle properties of parallel lines
	Angles in a polygon
	Bearings
Length, area and volume	Area of a rectangle
	Area of a triangle
	Area of a trapezium
	Volume of a cube
	Volume of a cylinder
Pythagoras's Theorem and Trigonometry	Pythagoras's Theorem
	Exact trigonometric values
<b>Probability</b>	
Probability	Probability scale
	Probability
	Frequency tree
	Tree diagram
	Combined events
<b>Statistics</b>	
Diagrams	Pictogram
	Bar chart
	Interpret graph
	Two-way table
	Frequency table
	Stem and leaf diagram
	Frequency polygon
Measures	Mode, median, mean, range
Population	Comparison of distributions