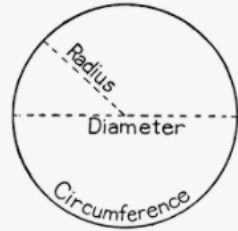


Quadratic Equations			
1	Quadratic Graph	A curved graph.	
		$y = ax^2 + bx + c$	
		Positive ax^2	'U' shape
		Negative ax^2	'∩' shape
2	Expand Two Binomials	$(x \pm a)(x \pm b)$	F - First O - Outside I - Inside L - Last
3	Solve a Quadratic Equation	Finds the roots by 1. Factorising	
4	Roots of a Quadratic Equation	Where the graph cuts the x axis/ $y = 0$	
5	Factorise a Quadratic	T – times E – end A – add M – middle	
6	DOTS	Difference of two squares.	
7	Maximum Turning Point	Where the gradients of a graph changes from positive to negative.	
8	Minimum Turning Point	Where the gradients of a graph changes from negative to positive.	
9	Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	
10	Y – intercept	The point in which the graph crosses the y axis. (c)	
Circles			
1	Pi (π)	A Greek letter used to represent the ratio of a circle's circumference to its diameter.	
2	Radius (r)	From a point on the circumference to the centre.	

3	Diameter (d)	From a point on the circumference to another point on the circumference, through the centre.	
4	Area of a Circle	πr^2	
5	Circumference	πd	The perimeter of a circle.
6	Segment	A region that is created by the arc and a chord of a circle.	
7	Chord	A line segment joining to points on a circle's circumference.	
8	Tangent	A line that touches the circumference of a circle.	
9	Arc	Part of a circumference of a circle.	
10	Sector	The area between two radiuses and the connecting arc.	
11	Arc length	$\frac{\theta}{360} \times 2\pi r$	
12	Area of a sector	$\frac{\theta}{360} \times \pi r^2$	
Volume and Surface Area			
1	Cylinder	A prism where the cross section is a circle.	
2	Sphere	A round 3D shape with every point at equal distance from the centre.	
3	Cone	A 3D object that has a circular base joined to a point by a curved face.	
4	Volume	The amount of space inside a shape.	
5	Surface Area	The total area of all faces of a 3D shape.	
6	Volume of a cylinder	$\pi r^2 \times length$	
7	Volume of a pyramid	$\frac{1}{3} \times area\ of\ the\ base \times height$	
8	Surface Area	The total area of all faces of a 3D shape.	
9	Surface area of a cylinder	$2\pi r^2 + \pi dh$	

Year 11 Foundation Unit 1 KO – Quadratic Equations and Graphs, Perimeter, Area and Volume of Circles, Cylinders, Spheres and Cones, Fractions and Reciprocals

Fractions and Reciprocals		
1	Fraction	The amount of parts of a whole.
2	Numerator	The top number in a fraction.
3	Denominator	The bottom number in a fraction.
4	Common Denominator	A common multiple of the denominators or two or more fractions.
5	Mixed Number	A whole number and a fraction combined.
6	Improper Fraction	A fraction where the numerator is bigger than the denominator.
7	Multiplicative Inverse	What you multiply a number by to get 1.
8	Reciprocal	1 divided by the number.
9	Adding and subtracting fractions	Use equivalent fractions to change each fraction to the common denominator, then add or subtract the numerators, keeping the denominator the same.
10	Multiplying Fractions	Multiply the numerators, multiply the denominators.
11	Dividing Fractions	KFC – keep the first fraction the same, F – flip the second fraction, C- change the divide to a multiply.