

Knowledge Organiser Maths Term 2 Year 7

The Numbers in **Red** are topics that have already been covered in either KS3 or KS4 and are being revisited to help the students to move onto more complicated topics.

The numbers in **blue** are the GCSE grade of the work being covered.

In **Green** is the Mathsgenie reference which can be used for further revision and questions to try. www.mathsgenie.co.uk

1. Shape 8 Hours		Key Words - Shape
Identify & name 3D shapes and their nets	2	Quadrilaterals - Trapezium, Square, Rectangle, Rhombus, Kite, Parallelogram Parallel - lines that are always an equal distance apart
Identify & name triangles & their properties	2	
Identify properties of Quadrilaterals	2	
Angles around a point	2 MG4	
Angles on a straight line	2 MG1/2	
Vertically Opposite angles	2/3 MG1/2	
2. Area and Perimeter 10 Hours		Key Words – Area and Perimeter
Find Perimeter of 2D shapes	2 MG1/2	Perimeter – the measurement taken around a shape Area – the measure taken inside a shape Volume – the measurement of the inside of a 3D shape
Find area of Rectangle/triangle/Parallelogram and Trapezium	2/3 MG1/2	
Find Circumference & area of Circles	3 MG3	
Volume of cubes and cuboids	2/3 MG1/2	
Find the volume of composite shapes made of cuboids	3/4 MG3	
3. Percentages and Fractions 9 Hours		Key Words – Percentages and Fractions
Simplify Fractions	1/2 MG1/2	Numerator – the number on the top of a fraction Denominator – the number on the bottom of a fraction Percentage change – the different between amounts expressed as a percentage
Improper to Mixed Numbers	2 MG1/2	
Fractions of Amounts	2 MG1/2	
Order fractions in terms of size	2	
Fractions to Percentages (& Vice Versa)	2 MG1/2	
Order fractions, %, decimals	3 MG1/2	
Calculate Percentages of Amounts	3 MG3	
Increase/Decrease by %	3 MG3	
Wordy Problems with fractions and %		
3. Fractions and Probability 11 Hours		Key Words – Fractions and Probability
Add and subtract fractions	2/3 MG3	Mixed Fraction – a number with a whole number and a fraction Probability – the chance of an event happening, written as a percentage, fraction or decimal Theoretical Probability – the probability that should happen mathematically if the element of chance is taken out
Multiply and Divide Fractions	2/3 MG3	
Understand the language of Probability	2	
Work out theoretical Probability	3 MG3	
Use sample space or frequency trees to work out Probability	3	
Work out the expected frequency of an outcome	4 MG4	