

Revision 'Must Know' Checklist: Y7 Maths Lower Classes

Below is a checklist of everything you must know to be successful by the end of this year.

Number	Algebra	Geometry and Measures	Ratio and Proportion	Statistics and Probability
<ul style="list-style-type: none"> Understand place value and write integers up to 1 billion Work out intervals and position integers on a number line Understand place value for decimals and position decimals on a number line Order decimals Round integers to powers of ten Represent tenths and hundredths as diagrams and on number lines Convert between fractional and decimal fifths and quarters Understand the relationship between fifths and tenths, quarters and hundredths Understand the meaning of a percentage using a hundred square Convert fluently between simple fractions, percentages, and decimals Represent fractions as diagrams and on a number line Work with and use equivalent fractions Use formal methods for addition and subtraction of decimals Solve problems involving addition and subtraction 	<ul style="list-style-type: none"> Describe and continue a sequence given diagrammatically Predict and check the next term of a sequence Represent sequences in tabular and graphical forms Recognise whether a sequence is linear or non-linear Continue a linear or non-linear sequence Explain the term-to-term rule for linear or non-linear sequences Use correct algebraic notation Use a function machine for numbers and variables Find inputs and outputs of one-step and two-step function machines Find unknown function given inputs and outputs Find the function given the expression Substitute values into single expressions and two step expressions 	<ul style="list-style-type: none"> Calculate the area of a rectangle and a parallelogram Calculate the area of a triangle Know how much each of the key metric measures represents Choose the most sensible metric measurement Convert between units of length Describe angles as a measure of turn Classify angles and triangles Draw and measure angles up to 360° Measure lengths and angles in triangles and use this to classify them Use angle notation to describe parallel and perpendicular lines Describe quadrilaterals using knowledge of parallel and perpendicular lines Accurately construct a triangle given three sides, two sides 		<ul style="list-style-type: none"> Calculate the mean from a set of data Find the range and median from a list of numbers Understand and use frequency trees and interpret bar charts Use and understand the probability scale Find the probability of a single event Understand and use the knowledge that probabilities sum to 1 Understand and use the vocabulary and symbols associated with sets Interpret and create Venn diagrams Understand and use the intersection and union of sets

<ul style="list-style-type: none"> • Read the time from both Digital and Analogue formats • Solve problems involving time • Use and interpret timetables to solve problems • Understand and use factors and multiples • Understand and recognise prime, square, and triangular numbers • Find common factors of a set of numbers including Highest Common Factor • Find common multiples of a set of numbers including Lowest Common Multiple • Write a number as a product of its prime factors • Understand and correctly apply the order of operations • Find a fraction of a given amount • Find a percentage of a given amount • Calculate percentages from a given percentage • Understand directed number in context and order directed numbers • Perform calculations that cross zero • Perform the four operations with directed numbers • Convert between mixed numbers and improper fractions • Add and subtract fractions with the same denominator and different denominators 	<ul style="list-style-type: none"> • Generate sequences by substituting into an expression • Plot functions as graphs • Understand the meaning of equality • Use bar models and fact families • Form and solve one-step equations involving the four operations • Understand the meaning of like and unlike terms • Simplify algebraic expressions by collecting like terms • Understand the meaning of equivalence and to recognise equivalent expressions • Substitute into an expression • Solve one step and two step equations 	<p>and an angle or two angles and a side</p> <ul style="list-style-type: none"> • Interpret and draw pie charts • Understand and use the sum of angles at a point and on a straight line • Understand and use the equality of vertically opposite angles • Understand and use the sum of angles on a straight line and in a triangle • Know and apply the sum of angles in a quadrilateral • Solve problems using the properties of triangles, quadrilaterals, and other angle rules 		
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<ul style="list-style-type: none">• Add and subtract fractions from integers• Add and subtract improper and mixed fractions				
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