

Revision 'Must Know' Checklist: Y7 Maths LA 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 • Read the time from both Digital and Analogue formats 	<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 • Generate sequences by substituting into an expression • Plot functions as graphs 	<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 and an angle or two angles and a side • Interpret and draw pie charts 		<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"> • 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 • Add and subtract fractions from integers • Add and subtract improper and mixed fractions 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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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