

Mathematics

Key Stage 3 - Year 7

Term One	Term Two	Term Three
Addition and Subtraction <ul style="list-style-type: none"> Place value Add and subtract with decimals Add and subtract with negative numbers Perimeter Algebraic notation Simplifying by collecting like terms 	Data Diagrams <ul style="list-style-type: none"> Different types of data Data collection and questionnaires Frequency tables Draw and interpret statistical diagrams including: <ul style="list-style-type: none"> Pictograms Composite bar charts Pie charts Line graphs Scatter graphs 	Angles <ul style="list-style-type: none"> Draw and measure angles, including use of angle notation Basic angle properties Angle properties within parallel lines Properties of triangles and quadrilaterals Construction of triangles
Multiplication and Division <ul style="list-style-type: none"> Powers of 10 Multiply and divide with decimals Multiply and divide with negative numbers Order of Operations Multiplicative reasoning Factors, multiples, HCF, LCM Area of triangles and quadrilaterals 	Applications of Algebra <ul style="list-style-type: none"> Forming expressions Substitution Expanding linear brackets Factorising linear expressions Forming and solving equations 	Fractions and Percentages (Non-Calc) <ul style="list-style-type: none"> Representing fractions Equivalent fractions Compare and order fractions Convert between mixed numbers and improper fractions Fractions of quantities Multiply and divide with fractions Fraction, decimal and percentage equivalents Percentage of amounts Percentage increase and decrease

Mathematics



KING EDWARD VI
SCHOOL LICHFIELD

Key Stage 3 - Year 8

Term One	Term Two	Term Three
Ratio and Proportion <ul style="list-style-type: none"> • Ratio notation and equivalence • Direct proportion • Conversion of measures • Conversion graphs • Sharing into ratio and problem solving • Speed, distance and time • Travel graphs 	Squares and Cubes <ul style="list-style-type: none"> • Squares and cube numbers • Index rules • Rounding and estimating 	Primes and Averages <ul style="list-style-type: none"> • Prime factorisation and HCF and LCM • Mean, median, mode and range • Averages using frequency tables • Comparing data sets
Algebraic Expressions <ul style="list-style-type: none"> • Inequalities • Expanding double brackets • Simultaneous equations • Factorising quadratic expressions 	Geometry <ul style="list-style-type: none"> • Area of quadrilaterals • Area and circumference of a circle • 2d representations of 3d shapes • Surface area • Volume 	Fractions and Percentages (Calc) and Graphs <ul style="list-style-type: none"> • Adding and subtracting fractions (non-calc) • Convert between FDP • Percentage of an amount, increase and decrease • Percentage change • Reverse percentages • Horizontal and vertical graphs • Linear graphs $y = mx + c$ • Gradient • Equations from graphs



Mathematics

Key Stage 3 - Year 9 – Set 1

Term One	Term Two	Term Three
<ul style="list-style-type: none">• Pythagoras and basic trigonometry• Ratio and proportion• Probability• Equations and algebraic fractions• Rearranging formulae• Linear graphs• Transformations	<ul style="list-style-type: none">• Indices and surds• Area and perimeter• Perimeter, circumference and area• Standard form• Scatter graphs	<ul style="list-style-type: none">• Angles• Properties of polygons• Statistical measures• Statistical diagrams• Inequalities• Quadratic equations• Factors and multiples (algebraic)• Speed, distance, time and travel graphs• Volume

Key Stage 3 - Year 9 – Set 2

Term One	Term Two	Term Three
<ul style="list-style-type: none">• Pythagoras theorem• Ratio and proportion• Probability• Algebraic manipulation• Solving equations• Co-ordinates and Linear graphs• Transformations	<ul style="list-style-type: none">• Rounding and estimating• Indices• Perimeter and area• Circumference and area• Standard form• Scatter graphs	<ul style="list-style-type: none">• Angles• Properties of polygons• Statistical measures• Statistical diagrams• Fractions and decimals• Inequalities• Factors and multiples• Speed, distance, time and travel graphs• Volume

Mathematics



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Key Stage 3 - Year 9 – Set 3

Term One	Term Two	Term Three
<ul style="list-style-type: none">• Angles• Ratio and proportion• Probability• Algebraic manipulation• Solving equations• Co-ordinates and Linear graphs• Transformations	<ul style="list-style-type: none">• Basic number• Rounding and estimating• Indices• Perimeter and area• Circumference and area• Percentages• Scatter graphs	<ul style="list-style-type: none">• Properties of polygons• Statistical measures• Statistical diagrams• Fractions and decimals• Inequalities• Factors and multiples• Speed, distance, time and travel graphs• Volume