# Mathematics

KING EDWARD VI
SCHOOL LICHFIELD

## Key Stage 4 - Year 10 – Higher

| Term One | Term Two | Term Three |
|---|---|---|
| • Algebra recap and extension<br>• Calculations with percentages<br>• Probability (not including tree diagrams)<br>• Ratio and proportion<br>• Rounding and estimation<br>• Equations and rearranging formulae<br>• Scatter Graphs<br>• Negative numbers, indices and standard form<br>• Quadratic equations and their graphs | • Decimals<br>• Collect and represent data<br>• Congruence and similarity<br>• Pythagoras and trigonometry<br>• Factors, multiples, primes<br>• Simultaneous equations<br>• Year 10 trials<br>• Scale drawings and bearings<br>• 2d representations of 3d shapes | • Sequences<br>• Surds<br>• Functions<br>• Constructions and loci<br>• Direct and inverse proportion equations<br>• Inequalities<br>• Volume<br>• Probability trees<br>• Transformations |

# Mathematics

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## Key Stage 4 - Year 10 – Foundation

| Term One | Term Two | Term Three |
|---|---|---|
| • Algebra recap and extension<br>• Calculations with percentages<br>• Probability (not including tree diagrams)<br>• Ratio and proportion<br>• Rounding and estimation<br>• Equations and rearranging formulae<br>• Scatter Graphs<br>• Negative numbers, indices and standard form<br>• Quadratic equations and their graphs | • Decimals<br>• Collect and represent data<br>• Congruence and similarity<br>• Pythagoras and trigonometry<br>• Factors, multiples, primes<br>• Simultaneous equations<br>• Year 10 trials<br>• Scale drawings and bearings<br>• 2d representations of 3d shapes | • Sequences<br>• Fractions<br>• Co-ordinates and linear graphs<br>• Construction and loci<br>• Inequalities<br>• Expanding and factorising double brackets<br>• Further perimeter and area<br>• Volume<br>• Probability trees<br>• Transformations |

# Mathematics

KING EDWARD VI
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## Key Stage 4 - Year 11 – Higher

| Term One | Term Two | Term Three |
|---|---|---|
| • Congruence and similarity<br>• Equations and graphs<br>• Sketching graphs<br>• Rearranging formulae<br>• Circle Theorems<br>• Transformations<br>• Scale drawings and bearings<br>• Graphical and quadratic inequalities<br>• Growth and decay<br>• Pythagoras and Trigonometry<br>• Probability | • Gradients and rates of change<br>• Area under curves<br>• Functions<br>• Transforming graphs<br>• Recurring decimals and fractions<br>• Travel graphs<br>• Arcs and sectors of circles<br>• Numerical methods (Iterations)<br>• Volume<br>• Vectors<br>• Equation of a circle<br>• Forming proofs | • Statistical measures<br>• Simultaneous equations<br>• Algebraic fractions<br>• Indices and surds |

# Mathematics

KING EDWARD VI
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## Key Stage 4 - Year 11 – Foundation

| Term One | Term Two | Term Three |
|---|---|---|
| • Vectors<br>• Fractions, decimals and percentages<br>• Growth and decay<br>• Pythagoras<br>• Trigonometry<br>• Standard form<br>• Basic number<br>• Indices<br>• Quadratic equations and their graphs<br>• Sketching graphs<br>• Ratio and proportion<br>• Proving identities | • Scale drawings and bearings<br>• Solving equations<br>• Solving simultaneous equations<br>• Direct and inverse proportion<br>• Angles<br>• Statistical measures<br>• Congruence and similarity<br>• Linear graphs<br>• Constructions and loci<br>• Transformations<br>• Area, perimeter and volume | • Area, circumference, arc and sectors of circles<br>• Rearranging equations<br>• Factors and multiples<br>• Calculations with fractions and decimals<br>• Collecting and representing data<br>• Inequalities |