

Produced by Third Space Learning:

Note: topics in bold appear on both tiers and so may be overlap questions

OCR Foundation

	Number	Ratio	Algebra	Geometry	Probability	Statistics
Paper 1	<ul style="list-style-type: none"> <li>Four rules with integers</li> <li>Money calculations</li> <li><b>Priority of operations</b></li> <li>Inverse operations</li> <li>Understand number definitions and terms</li> <li>Prime numbers</li> <li>Fraction, decimals and percentages</li> <li>Fraction of a quantity</li> <li>Percentages of quantities</li> <li><b>Percentage change</b></li> <li><b>Reverse percentages</b></li> <li>Listing FDP in order</li> <li>Use of calculator</li> <li>Standard form notation</li> <li>Rounding</li> <li><b>Upper and lower bounds</b></li> </ul>	<ul style="list-style-type: none"> <li>Share into a ratio</li> <li>Use a ratio</li> </ul>	<ul style="list-style-type: none"> <li>Simplifying algebraic expressions</li> <li>Factorising expressions</li> <li>Linear equations</li> <li><b>Solving inequalities</b></li> <li>Function machines</li> <li><b>Quadratic graphs</b></li> </ul>	<ul style="list-style-type: none"> <li>Polygons (notation and terms)</li> <li><b>Properties of parallel lines</b></li> <li>Properties of solids</li> <li>Column vectors</li> <li>Time</li> <li><b>Compound units: rates</b></li> <li>Area of a rectangle</li> <li>Area of a circle</li> <li>Area of composite shapes</li> <li><b>Volume including cylinder, pyramid and sphere</b></li> </ul>	N/A	<ul style="list-style-type: none"> <li>Averages and range</li> <li><b>Scatter diagram and correlation</b></li> <li>Graphical misrepresentation</li> <li>Frequency tree</li> </ul>
Paper 2	<ul style="list-style-type: none"> <li>Arithmetic with positive and negative numbers</li> <li>Division of a quantity</li> <li><b>Prime factors</b></li> <li>Fraction, decimals and percentages</li> <li>Fractions of a quantity</li> <li><b>Fraction arithmetic</b></li> <li>Calculations with decimals</li> <li>Percentage conversions</li> <li>Percentage of a quantity</li> <li><b>Standard form calculations</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Simplify ratio</b></li> <li>Interpreting ratio</li> <li><b>Inverse proportion</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Multiplying out brackets</b></li> <li><b>Formulate algebraic expressions</b></li> <li>Equations and identities</li> <li>Solve linear equations</li> <li><b>Solve quadratic equations</b></li> <li>Rearrange equations</li> <li><b>Equation of a straight line</b></li> </ul>	<ul style="list-style-type: none"> <li>Construct and interpret angle bisector, line bisector and distance from a point.</li> <li><b>Transformations</b></li> <li>Money</li> <li><b>Bearings</b></li> <li>Area of a triangle</li> <li><b>Trigonometry</b></li> <li><b>Exact trigonometric ratios</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Relative frequency</b></li> <li>Probability of equally likely events</li> </ul>	<ul style="list-style-type: none"> <li>Bar chart and <b>Pie chart</b></li> </ul>
Paper 3	<ul style="list-style-type: none"> <li>Calculations with integers</li> <li>Calculations with decimals</li> <li>Prime numbers</li> <li>Factors, multiples and LCM</li> <li>Sequence rule to find a term</li> <li>Understand number definitions and terms</li> <li>Fractions, decimals and percentages</li> <li>Fraction of a quantity</li> <li>Fraction arithmetic</li> <li>Percentage of a quantity</li> <li><b>Percentage change</b></li> <li>Powers of integers</li> <li>Use of calculator</li> </ul>	<ul style="list-style-type: none"> <li>Write in a ratio</li> <li>Simplify a ratio</li> <li><b>Calculate with proportions</b></li> <li>Share in a ratio</li> <li><b>Direct proportion</b></li> <li>Simple interest</li> <li><b>Growth and decay problems</b> and graphs</li> </ul>	<ul style="list-style-type: none"> <li>Simplify algebraic products and quotients</li> <li><b>Multiply out brackets</b> and simplify</li> <li>Factorise quadratic expressions</li> <li>Substitute into an expression</li> <li><b>Solve linear equation</b></li> <li>Solve simultaneous equations</li> <li>Continue sequence</li> <li>Quadratic graphs</li> <li>Graphs of real-world contexts</li> </ul>	<ul style="list-style-type: none"> <li>Symmetry</li> <li>Circle terms</li> <li>Properties of quadrilaterals</li> <li><b>Mass, Volume, Density</b></li> <li>Perimeters of triangles and quadrilaterals</li> <li><b>Volume and surface area: cuboid and prism</b></li> </ul>	<ul style="list-style-type: none"> <li>Understand the probability scale</li> <li>Probability calculation</li> <li>Listing outcomes and related probabilities</li> <li>Tree diagram</li> <li><b>Calculation with the laws of probability</b></li> </ul>	<ul style="list-style-type: none"> <li>Averages</li> </ul>

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OCR Higher

	Number	Ratio	Algebra	Geometry	Probability	Statistics
Paper 4	<ul style="list-style-type: none"> <li>• Calculator use: quotients</li> <li>• <b>Priority of operations</b></li> <li>• Percentage calculations</li> <li>• <b>Percentage change</b></li> <li>• <b>Reverse percentages</b></li> <li>• <b>Upper and lower bounds</b></li> <li>• Standard form representation</li> <li>• Decimal, fractions and percentages equivalence</li> </ul>	<ul style="list-style-type: none"> <li>• Direct proportion</li> <li>• Solve ratio and proportion problems</li> <li>• Growth and decay problems</li> </ul>	<ul style="list-style-type: none"> <li>• Factorise quadratic expressions</li> <li>• Multiplying out brackets</li> <li>• Algebraic fractions</li> <li>• Substitute values into expressions</li> <li>• Formulate algebraic expressions</li> <li>• Use of brackets</li> <li>• <b>Solving inequalities</b></li> <li>• Drawing and interpreting graphs</li> <li>• <b>Quadratic graphs</b></li> <li>• Equations of circles</li> <li>• Algebraic proofs</li> </ul>	<ul style="list-style-type: none"> <li>• Properties of a triangle</li> <li>• Circle terms</li> <li>• Angles in polygons</li> <li>• <b>Properties of parallel lines</b></li> <li>• Units of length and time</li> <li>• <b>Compound units: rates</b></li> <li>• <b>Volume of pyramid and sphere</b></li> <li>• Standard circle theorems</li> <li>• Circumference of a circle</li> <li>• Pythagoras' theorem</li> </ul>	<ul style="list-style-type: none"> <li>• Enumeration</li> <li>• Calculation with the laws of probability</li> <li>• Conditional probability</li> </ul>	<ul style="list-style-type: none"> <li>• Collecting data</li> <li>• <b>Scatter diagrams and outliers</b></li> </ul>
Paper 5	<ul style="list-style-type: none"> <li>• <b>Fraction arithmetic</b></li> <li>• Decimal arithmetic</li> <li>• Types of numbers</li> <li>• <b>Factors and multiples</b></li> <li>• Decimals and fractions</li> <li>• Recurring decimals</li> <li>• Percentage calculations</li> <li>• Percentage change</li> <li>• Index notation</li> <li>• Powers of integers</li> <li>• Laws of indices</li> <li>• Surds and exact calculations</li> <li>• Rounding</li> <li>• Estimation</li> <li>• Standard form representation</li> <li>• <b>Standard form calculation</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Simplify ratios</b></li> <li>• Use ratio</li> <li>• <b>Inverse proportion</b></li> </ul>	<ul style="list-style-type: none"> <li>• Simplifying algebraic expressions</li> <li>• Formulate algebraic expressions</li> <li>• <b>Multiplying out brackets</b></li> <li>• Rearranging formulae</li> <li>• Substitute values into expressions</li> <li>• Use of brackets</li> <li>• Use kinematics formulae</li> <li>• <b>Quadratic equations</b></li> <li>• Approximate solutions by iteration</li> <li>• Equations of circles</li> <li>• Drawing and interpreting graphs</li> <li>• Distance/speed – time graphs</li> <li>• Parallel and perpendicular lines</li> <li>• <b>Equation of a line</b></li> </ul>	<ul style="list-style-type: none"> <li>• Units of speed, distance and time</li> <li>• <b>Transformations</b></li> <li>• Construct loci</li> <li>• Maps, <b>bearings</b> and scale drawings</li> <li>• Circumference of a circle and length of an arc</li> <li>• Area of a rectangle</li> <li>• <b>Trigonometry</b></li> <li>• <b>Exact trigonometric ratios</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Relative frequency</b></li> <li>• Equally likely outcomes and probability</li> <li>• Venn diagrams and sets</li> <li>• Conditional probability</li> </ul>	<ul style="list-style-type: none"> <li>• Graphical misrepresentation</li> <li>• <b>Pie chart</b></li> <li>• Line graph and time series</li> </ul>
Paper 6	<ul style="list-style-type: none"> <li>• Types of numbers</li> <li>• Factors and multiples</li> <li>• <b>Percentage change</b></li> <li>• Reverse percentages</li> <li>• Index notation</li> <li>• Laws of indices</li> <li>• Rounding</li> <li>• Standard form calculation</li> </ul>	<ul style="list-style-type: none"> <li>• Use ratio</li> <li>• <b>Calculate with proportions</b></li> <li>• <b>Direct proportion</b></li> <li>• <b>Growth and decay problems</b></li> </ul>	<ul style="list-style-type: none"> <li>• Simplifying algebraic expressions</li> <li>• Completing the square</li> <li>• <b>Multiplying out brackets</b></li> <li>• Formulate algebraic expressions</li> <li>• Rearranging formulae</li> <li>• Factorise expressions</li> <li>• Use of brackets</li> <li>• <b>Linear equations</b></li> <li>• Quadratic equations</li> <li>• Graphical inequalities</li> <li>• Features and types of graphs</li> <li>• Trigonometric graphs</li> <li>• Transformations of graphs</li> <li>• Drawing and interpreting graphs</li> <li>• Solution set for inequalities</li> </ul>	<ul style="list-style-type: none"> <li>• Reasons for congruency</li> <li>• Length, area and volume scale factors of similar figures</li> <li>• Units of money, distance, time, <b>density, mass, volume</b> and area</li> <li>• Area of a triangle</li> <li>• <b>Volume and surface area: cuboid and prism</b></li> <li>• Area and circumference of a circle</li> <li>• Trigonometry</li> <li>• Solving non-right-angled triangles</li> </ul>	<ul style="list-style-type: none"> <li>• Equally likely outcomes and probability</li> <li>• Sample spaces</li> <li>• Enumeration</li> <li>• <b>Calculation with the laws of probability</b></li> <li>• Conditional probability</li> </ul>	<ul style="list-style-type: none"> <li>• Cumulative frequency</li> </ul>