

Year 11 Mocks Personalised Learning Checklist

The mock exam papers (there are three) will be the new GCSE style paper. It may contain topics not covered yet but you should revise everything that you have done since Year 10

	RAG	Action
Basic number		
Multiplication and division of decimals		
Estimating		
Multiples, factors and prime numbers, powers and roots		
Prime factors, finding HCF and LCM		
Solving real-life problems		
Fractions, ratio and proportion		
Calculations with fractions		
Percentage increase and decrease		
Expressing one quantity as a percentage of another		
Statistical diagrams and averages		
Pie charts and bar charts		
Mean, mode, median		
Scatter diagrams, line of best fit		
Number and sequences		
Finding the nth term of a linear sequence		
Finding the nth term of a quadratic sequence		
Geometric sequences		
Ratio and proportion		
Ratio		
Direct proportion problems		
Best buys		
Compound measures		
Compound interest		
Reverse percentage		
Angles		
Angles in a polygon		
Regular polygons		
Angles in parallel lines		
Special quadrilaterals		
Scale drawings and bearings		
Transformations, constructions and Loci		
Congruent triangles		
Rotational symmetry		
Transformations (translation, reflection, rotation, enlargement)		

Constructions and bisectors		
Loci problems		
Plans and elevations		
Algebraic manipulation		
Basic algebra		
Quadratic expansion (FOIL)		
Expansion of more than 2 binomials		
Quadratic factorisation		
Difference of 2 squares		
Change of subject with a formula		
Length, area and volume		
Circumference and area of a circle		
Areas of parallelogram, trapezium		
Area of a sector		
Volumes of prisms		
Volumes of cones, pyramids and spheres		
Linear graphs		
Using $y = mx + c$		
Real-life graphs		
Solving simultaneous equations using graphs		
Parallel and perpendicular gradients		
Right angles triangles		
Pythagoras' theorem		
3D Pythagoras' theorem		
SOHCAHTOA		
Similarity		
Similar triangles		
Similar shapes – area and volume scale factors		
Applying probability		
Experimental probability		
Mutually exclusive events and exhaustive outcomes		
Expectation		
Two-way tables and probability		
Probability and Venn diagrams		
Powers and standard form		
Index laws		
Standard form		
Equations and inequalities		
Solving linear equations		
Simultaneous equations – elimination method		
Simultaneous equations – substitution method		

Using simultaneous equations to solve problems		
Linear inequalities		
Graphical inequalities		
Counting, accuracy, powers and surds		
Rational numbers, reciprocals		
Terminating and recurring decimals		
Negative and fractional powers		
Surds		
Limits of accuracy		
Choices and outcomes		
Quadratic equations		
Plotting quadratic graphs		
Solving a quadratic by factorising		
Quadratic formula		
Solving a quadratic by completing the square		
The significant points of a quadratic		
Solving a linear and non-linear equation graphically		
Solving quadratics by the method of intersection		
Solving linear and non-linear graphs algebraically		
Quadratic inequalities		
Sampling and more complex diagrams		
Sampling methods		
Frequency polygons		
Cumulative frequency graphs		
Box plots		
Histograms		
Combined events		
Addition rule (OR)		
Combined events		
Tree diagrams		
Independent events (AND)		
Conditional probability		
Properties of circles		
Circle theorems		
Cyclic quadrilaterals		
Tangents and chords		
Alternate segment theorem		
Variation		
Direct proportion		
Inverse proportion		

Triangles		
Further 2D problems		
Further 3D problems		
Sin, cos and tan graph		
Sine and cosine rule		
Area of triangle using sine formula		
Graphs		
Distance-time graphs		
Velocity-time graphs		
Estimating area under a curve		
Rates of change		
Equation of a circle		
Other graphs		
Transformations of graphs		
Algebraic fractions		
Changing the subject of a formula		
Functions		
Composite functions		
Iteration		
Vector geometry		
Properties of vectors		
Solving vector problems		