Grades 6-9 Y11 Independent Revision Plan

| Week starting |  | Maths genie |
| --- | --- | --- |
| 13 Feb | Trigonometry: SOHCAHTOASine and cosine ruleArea of a triangle 1/2absinCExact values3D Pythagoras and Trigonometry |  |
| Half Term | Changing the SubjectTransformations of GraphsSequencesBounds |  |
| 27 Feb | Simplifying surds and rationalising the denominatorIndicesAlgebraic fractionsExpanding Triple Brackets |  |
| 6 March | Factorising quadraticsCompleting the SquareQuadratic Formula |  |
| 13 March | HistogramsVenn diagramsProbabilityStandard Form |  |
| 20 March | Similarity and congruenceCumulative frequency and box plotsRatio and Proportion |  |
| 27 March | Circle TheoremsArea of sectors and segments, arc lengthEquation of a circleCompound Measures |  |
| EASTER | IterationRecognising and sketching graphsReal Life GraphsReverse Percentages |  |
| EASTER | Simultaneous equations (including with 1 quadratic)Converting recurring decimals to fractionsFunctions |  |
| 17 April | VectorsVolume and surface areaSimilar shapes |  |
| 24 April | Reflections, rotation, enlargement, translationSampling - capture recaptureAlgebraic proof |  |
| 1 May | Straight line graphs and geometryGradient of curvesTrapezium rule for area |  |
| 8 May | Solving inequalitiesGraphing inequalitiesQuadratic inequalities |  |

**HIGHER - Grades 5 – 9**

**Algebra**

| I can do this  | Grade | Title |  | I can do this  | Grade | Title |
| --- | --- | --- | --- | --- | --- | --- |
|  | 9 | Approximate solutions to equations using iteration. |  |  | 6 | Quadratic equations (factorisation) |
|   | 9 | Equation of a circle |  |  | 6 | Quadratic equations (graphical methods) |
|  | 9 | Equation of a tangent  |  |  | 6 | Represent linear inequalities |
|  | 8 | Algebra and Proof |  |  | 6 | Simultaneous equations (linear) |
|  | 8 | Gradients and area under a graph |  |  | 5 | Algebraic argument |
|  | 8 | Graphs of trigonometric functions |  |  | 5 | Algebraic terminology |
|  | 8 | Quadratic equations (completing the square) |  |  | 5 | Cubic and Reciprocal graphs |
|  | 7 | Composite functions |  |  | 5 | Deduce quadratic roots algebraically |
|  | 7 | Expand the product of two or more binomials |  |  | 5 | Derive an equation |
|  | 7 | Factorising difficult quadratic expressions |  |  | 5 | Equation of a line |
|  | 7 | Geometric Sequences |  |  | 5 | Expand the product of two binomials |
|  | 7 | Graphs of exponential functions |  |  | 5 | Factorising quadratic expressions |
|  | 7 | Quadratic equations (needing re-arrangement) |  |  | 5 | Fibonacci, quadratic and simple geometric sequences  |
|  | 7 | Quadratic equations (quadratic formula) |  |  | 5 | Graphical solution to equations |
|  | 7 | Real-life exponential graphs |  |  | 5 | Inequalities on number lines |
|  | 7 | Represent quadratic inequalities |  |  | 5 | Linear equations |
|  | 7 | Simultaneous equations (non-linear) |  |  | 5 | Quadratic graphs |
|  | 7 | Solve quadratic inequalities |  |  | 5 | Reciprocal real-life graphs |
|  | 7 | Translations and reflections of a function |  |  | 5 | Simplify indices |
|  | 7 | Turning points & completing the square |  |  | 5 | Simplify surds |
|  | 6 | Algebraic fractions |  |  | 5 | Solve linear inequalities in one variable |
|  | 6 | Identifying parallel lines |  |  | 5 | Writing formulae and expressions |
|  | 6 | Inverse functions |  |  |  |  |
|  | 6 | Linear inequalities in two variables |  |  |  |  |

**Geometry and Measures**

| I can do this  | Grade | Title |
| --- | --- | --- |
|  | 8 | Circle theorems |
|  | 8 | Vector arguments and proof |
|  | 7 | Area of a triangle |
|  | 7 | Cosine Rule |
|  | 7 | Pythagoras and trig 2D and 3D |
|  | 7 | Sine Rule |
|  | 6 | Combined transformations |
|  | 6 | Congruence and Similarity |
|  | 6 | Standard trigonometric ratios |
|  | 5 | Arc lengths and sectors |
|  | 5 | Derive triangle results |
|  | 5 | Enlargements and negative SF |
|  | 5 | Loci |
|  | 5 | Pythagoras |
|  | 5 | Similarity and Congruence |
|  | 5 | Standard constructions |
|  | 5 | Surface Area |
|  | 5 | Trigonometric ratios |
|  | 5 | Volume |
|  | 4 | Alternate and corresponding angles |
|  | 4 | Area of a circle |
|  | 4 | Areas of composite shapes |
|  | 4 | Areas of triangles, trapezia and parallelograms |
|  | 4 | Bearings |
|  | 4 | Circle terminology |
|  | 4 | Circumference of a circle |
|  | 4 | Congruent triangles |
|  | 4 | Enlargements and fractional SF |
|  | 4 | Perimeter of 2D shapes |
|  | 4 | Plans and elevations |
|  | 4 | Polygons |
|  | 4 | Solve geometrical problems |
|  | 4 | Vector arithmetic |
|  | 4 | Volume of prisms |

**Number**

| I can do this  | Grade | Title |
| --- | --- | --- |
|  | 8 | Surds |
|  | 7 | Index Laws (negative and fractional) |
|  | 7 | Product rule |
|  | 7 | Recurring Decimals |
|  | 7 | Upper and lower bounds |
|  | 6 | Finance 1 |
|  | 6 | Powers and Roots |
|  | 6 | Product of prime factors |
|  | 6 | Using Pi |
|  | 5 | Calculating with fractions |
|  | 5 | Error intervals |
|  | 5 | Index Laws |
|  | 5 | Limits of accuracy |
|  | 4 | Adding and subtracting fractions |
|  | 4 | Checking calculations |
|  | 4 | Compound measures |
|  | 4 | Converting metric units |
|  | 4 | Estimation |
|  | 4 | Fractions and percentages  |
|  | 4 | Fractions and ratio problems |
|  | 4 | Interpret calculator displays |
|  | 4 | LCM and HCF  |
|  | 4 | Multiples and factors |
|  | 4 | Multiplying fractions |
|  | 4 | Operations |
|  | 4 | Order of operations |
|  | 4 | Powers  |
|  | 4 | Rounding |
|  | 4 | Standard Form |
|  | 4 | Terminating decimals and fractions |

**Exam details:**

**Edexcel GCSE Mathematics - Higher Exam Dates: All papers 90 mins each**

**Paper 1 (non-calc) - Friday 19th May 2023 AM**

**Paper 2 (calc) – Wednesday 7th June 2023 AM**

**Paper 3 (calc) –Wednesday 14th June 2023 AM**