

For some of our students, formal exams have been something they have not completed regularly or at all. We are aware that all students have had significant disruption over the last two years. In order to support you to support them effectively at home, we would like to give you the following information:

The Topics students will be tested on are:

Higher Tier:

- Calculations, Checking and Rounding
- Indices, Roots and Reciprocals
- Multiples, Factors, Primes
- Standard Form
- Surds and Indices
- Algebraic Expressions, Substitution, Factorising, Re-arranging & solving Equations & Inequalities
- Sequences
- Averages and Range
- Collecting Data
- Representing Data
- Cumulative Frequency, Box Plots and Histograms
- Fractions and Percentages
- Ratio and Proportion
- Direct and Inverse Proportion
- Polygons, Angles and Parallel Lines
- Pythagoras' Theorem and Trigonometry
- Graphs: Basics and Real-Life
- Linear Graphs and Co-ordinate Geometry
- Quadratic, Cubic and other Graphs, Reciprocal and Exponential Graphs
- Solving Quadratic and Simultaneous Equations
- Perimeter, Area and Circles
- Volume, Cylinders, Cones and Spheres
- Accuracy and Bounds
- Transformations
- Similarity and Congruence in 2D and 3D
- Constructions, Loci and Bearings
- Inequalities
- Probability
- Multiplicative Reasoning
- Graphs of Trigonometric Functions
- Further Trigonometry
- Quadratics, Graphs of Circles
- Circle Theorems
- Circle Geometry
- Re-arranging Formulae (More Complex), Solving Equations arising from Algebraic Fractions, Simultaneous Equations involving Quadratics
- Functions
- Proof
- Vectors and Geometric Proof
- Gradient and Area under Graphs
- Transforming Graphs

Foundation Tier:

- Integers and Place Value
- Decimals
- Factors Multiples and Primes
- Indices, Powers and Roots

Foundation Tier continued:

- Properties of Shapes, Parallel Lines and Angle Facts
- Interior and Exterior Angles of Polygons
- Perimeter, Area and Volume
- Real-Life Graphs
- Straight-Line Graphs
- Pythagoras' Theorem and Trigonometry
- Probability
- Transformations
- Similarity and Congruence in 2-D
- Plans and Elevations
- Constructions, Loci and Bearings
- Quadratic Equations – Expanding and Factorising
- Compound Measures
- Cones, Cylinders and Spheres
- Vectors
- Re-arranging Equations
- Graphs of Quadratic, Cubic and Reciprocal Functions
- Simultaneous Equations

Suggested Revision Focus:

Week commencing	Focus
6 th January	NUMBER FOCUS HIGHER <ul style="list-style-type: none">• Calculations, Checking and Rounding• Indices, Roots and Reciprocals• Multiples, Factors, Primes• Standard Form• Surds and Indices• Fractions and Percentages• Ratio and Proportion• Direct and Inverse Proportion• Accuracy and Bounds FOUNDATION <ul style="list-style-type: none">• Integers and Place Value• Decimals• Factors Multiples and Primes• Indices, Powers and Roots• Fractions and Reciprocals• Indices and Standard Form• Fractions, Decimals and Percentages• Percentages• Ratio• Proportion

Suggested Revision Focus:

13th January	STATISTICS AND PROBABILITY FOCUS HIGHER <ul style="list-style-type: none">• Averages and Range• Collecting Data• Representing Data• Cumulative Frequency, Box Plots and Histograms• Probability FOUNDATION <ul style="list-style-type: none">• Tables, Graphs and Charts• Pie Charts• Scatter Graphs• Statistics, Sampling and Averages• Probability
20th and 27th January	ALGEBRA FOCUS HIGHER <ul style="list-style-type: none">• Algebraic Expressions, Substitution, Factorising, Re-arranging & solving Equations & Inequalities• Sequences• Linear Graphs and Co-ordinate Geometry• Quadratic, Cubic and other Graphs, Reciprocal and Exponential Graphs• Solving Quadratic and Simultaneous Equations• Inequalities• Re-arranging Formulae (More Complex), Solving Equations arising from Algebraic Fractions, Simultaneous Equations involving Quadratics• Functions• Proof• Gradient and Area under Graphs• Transforming Graphs FOUNDATION <ul style="list-style-type: none">• Algebraic Manipulation• Expressions and Substitution• Equations and Inequalities• Sequences• Straight-Line Graphs• Quadratic Equations – Expanding and Factorising• Re-arranging Equations• Graphs of Quadratic, Cubic and Reciprocal Functions• Simultaneous Equations
3rd and 10th February	GEOMETRY FOCUS HIGHER <ul style="list-style-type: none">• Polygons, Angles and Parallel Lines• Pythagoras' Theorem and Trigonometry• Graphs: Basics and Real-Life• Perimeter, Area and Circles• Volume, Cylinders, Cones and Spheres• Transformations• Similarity and Congruence in 2D and 3D• Constructions, Loci and Bearings• Vectors and Geometric Proof• Graphs of Trigonometric Functions• Further Trigonometry• Quadratics, Graphs of Circles• Circle Theorems• Circle Geometry

Suggested Revision Focus:

3rd and 10th February

GEOMETRY FOCUS

FOUNDATION

- Properties of Shapes, Parallel Lines and Angle Facts
- Interior and Exterior Angles of Polygons
- Perimeter, Area and Volume
- Real-Life Graphs
- Transformations
- Similarity and Congruence in 2-D
- Plans and Elevations
- Constructions, Loci and Bearings
- Compound Measures
- Cones, Cylinders and Spheres
- Vectors

Recommended revision sites/resources:

- **Sparx Maths – Sparx offers “Boost” and “Target” tasks in addition to the weekly homework. “Boost” extends the current work and “Target” address any areas of difficulty identified. Both are targeted to the individual needs of students. Students can also search topics through the independent work section**

There are many useful (and free) websites for Maths revision. Detailed below are some we use in school:

- <https://www.mathsgenie.co.uk/> – **lots of videos, revision notes, exam questions and solutions**
- <https://corbettmaths.com/2023/08/01/gcse-revision/> – **lots of videos, revision notes, exam questions and solutions**
- <https://www.physicsandmathstutor.com/maths-revision/> – **lots of exam questions and mark schemes**
- <https://www.onmaths.co.uk> – **lots of online exam papers and questions**
- **Your teachers – see your teachers for help and guidance with revision**

Hints and Tips:

- **The list above is the topics you have covered in Maths since the start of Year 10. Work through the topic list carefully and practice each content area**
- **If you are unsure about any topics or want to know how to find further revision practice please see your Maths teacher and they will explain**
- **Remember the best way to revise Maths is to do Maths!**