Year 11 Overview

| Week Number | 11 Higher | Chapter | 11 Foundation | Chapter |
| :---: | :---: | :---: | :---: | :---: |
| Week 1 | Bounds | 13 | Pythagoras' Theorem | 12 |
| Week 2 | Area of Non Right Angled Triangles |  | Trigonometry - Missing Sides |  |
| Week 3 | Sine \& Cosine Rules |  | Trigonometry - Missing Angles |  |
| Week 4 | Transforming Graphs |  | Simple Probability and Probability Tables | 13 |
| Week 5 | Cumulative Frequency \& Box Plots | 14 | Two Way Tables and Sample Space Diagrams |  |
| Week 6 | Histograms |  | VENN Diagrams \& Frequency Diagrams |  |
| Week 7 | MOCK WEEKS |  | MOCK WEEKS |  |
| Week 8 | MOCK WEEKS |  | MOCK WEEKS |  |
| Week 9 | Solving Equations Graphically (Sim, Ineq, Quad) | 15 | Probability Trees | 13 |
| Week 10 | Roots of Cubics \& Turning Points |  | SDT, DMV, PFA | 14 |
| Week 11 | Proof of Circle Theorems | 16 | Compound Percentage Change, Reverse Percentage |  |
| Week 12 | Applying Circle Theorems |  | Direct \& Inverse Proportion |  |
| Week 13 | Rearrange Complex Formulae | 17 | Plans and Elevations, 3D Shapes | 15 |
| Week 14 | Algebraic Fractions - inc Simplify |  | Constructions, Loci and Bearings |  |
| Week 15 | Surds - Expanding Brackets |  | Plotting Quadratics | 16 |
| Week 16 | Algebraic Proof |  | Solving Quadratics |  |
| Week 17 | Function Notation - Inc Comp and Inverse |  | Labelling Circles, Area \& Perimeter | 17 |
| Week 18 | Function Notation - Inc Comp and Inverse |  | Spheres, Pyramids, Cones and Cylinders |  |
| Week 19 | MOCK WEEKS |  | MOCK WEEKS |  |
| Week 20 | Vector Notation inc Straight Line and Parallel | 18 | Standard Form - Converting and Calculations | 18 |
| Week 21 | Vector Notation inc Straight Line and Parallel |  | Similarity \& Congruence | 19 |
| Week 22 | Direct \& Inverse Proportion | 19 | Vectors (Simple) |  |
| Week 23 | Exponential Functions |  | Solving Simultaneous Equations | 20 |
| Week 24 | Gradient of a Curve |  | Rearranging Formulae |  |
| Week 25 | Area under a Curve |  | Proof |  |
| Week 26 | REVISION WEEKS |  | REVISION WEEKS |  |
| Week 27 | REVISION WEEKS |  | REVISION WEEKS |  |
| Week 28 | REVISION WEEKS |  | REVISION WEEKS |  |
| Week 29 | REVISION WEEKS |  | REVISION WEEKS |  |
| Week 30 | REVISION WEEKS |  | REVISION WEEKS |  |
| Week 31 | REVISION WEEKS |  | REVISION WEEKS |  |
| Week 32 | POST EXAM |  | POST EXAM |  |
| Week 33 | POST EXAM |  | POST EXAM |  |
| Week 34 | POST EXAM |  | POST EXAM |  |
| Week 35 | POST EXAM |  | POST EXAM |  |
| Week 36 | POST EXAM |  | POST EXAM |  |
| Week 37 | POST EXAM |  | POST EXAM |  |
| Week 38 | POST EXAM |  | POST EXAM |  |

## Term 2A - Foundation

Topic

| Labelling Circles, Area \& Perimeter |
| :---: |
| Spheres, Pyramids, Cones and Cylinders |
|  |
| Fractions and indices |
| Standard Form - Converting and Calculations |

Similarity \& Congruence

Vectors (Simple)

## Small Steps

Understand and use correct vocabulary for circles and perimeters
Calculate the circumference of a circle
Solve problems involving the circumference of a circle
Calculat the area of a circle
Solve problems involving the area of a circle
Give answers in terms of $\pi$
Calculate the area of semi circles and quarter circles
Solve problems involving sectors of circles
Solve problems involving area and perimeter of 2D shapes
Work out percentage error intervals
Work out the volume and surface area of cylinders
Work out the volume of a pyramid
Work out the surface area of a pyramid
Work out the volume of a cone
Work out the surface area of a cone
Work out the volume of a sphere
Work out the surface area of a sphere
Work out the area and volume of composite solids
Multiply and divide mixped numbers and fractions
Know and use the laws of indices
Write large numbers in standard form
Convert numbers from standard to ordinary form
Write small number in standard form
Convert numbers from standard form to ordinary (with negative powers)
Multiply and divide numbers in standard form
add and subtract numbers in standard form
Understand similarity
Use similarity to solve angle problems
Find the scale factor of an enlargement
Use similarity to solve problems
Understand the similarity of regular polygons
Calculate perimeters of similar shapes
Recognise congruent shapes
Use congruence to work out unknown angles
Use congruence to work out unknown sides
Add and subtract vectors
Find the resultant of two vectors
Subtract vectors
Find multiples of a vector

Term 2A - Higher

| Topic | Small Steps |
| :---: | :---: |
| Algebraic Proof | Prove a result using algebra |
|  | Proof by contraduction |
| Function Notation - Inc Comp and Inverse | Use function notation |
|  | Find composite functions |
|  | Find inverse functions |
| Vector Notation inc Straight Line and Parallel | Understand and use vector notation |
|  | Work out the magnitude of a vector |
|  | Calculate using vectors and represent the solutions graphically |
|  | Calculate the resultant of two vectors |
|  | Solve problems using vectors |
|  | Use the resultant of two vectors to solve vector problems |
|  | Express points as positiob vectors |
|  | Prove lines are parallel |
|  | Prove points are colinear |
|  | Solve geometric problems in two dimensions using vector methods |
|  | Apply vector methods for simple geometric proofs |

