



**Exam Board:** *Eduqas*  
**Qualification:** *C300U*  
**Assessment Information:** *2 exams, (non-calculator/calculator) each 2hrs 15 mins*  
[Link to official specification](#)

**Department Information:**  
*Students have 7-8 one hour lessons every fortnight. They are taught in ability groups, with sets 1 and 2 following the Higher tier GCSE content. All students have online access to their class texts and a personalised learning platform to ensure they are suitably challenged and supported. Students have four scheduled PPE assessments during the year, of increasing length.*

**ACHIEVE in the curriculum:**  
*Students are encouraged to work **collaboratively** on problems, to show **ambition** through the resources they opt to work on, to show **endurance** to master concepts and to demonstrate **integrity** in their personalised home learning. We strive for students to share in our love of maths and ultimately be **happy** in their lessons.*

**Curriculum Aims & Intent:**  
*Our curriculum encourages students to develop confidence in mathematics and to recognise the importance of mathematics in their own lives. Our aim is to enable students to:* •develop fluent knowledge, skills and understanding of mathematical methods and concepts •acquire, select and apply mathematical techniques to solve problems •reason mathematically, make deductions and inferences and draw conclusions •comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context. There is an emphasis on problem solving which provides a strong mathematical foundation for learners who go on to study mathematics post-16.

**Resources:**  
<https://www.pearsonactivelearn.com/app/home> - online GCSE (9-1) textbooks (login as a student with school email and password: FurzePlatt1).  
<https://www.sparxmaths.uk/> - (select school and then click 'Login using Microsoft')  
<https://login.mymaths.co.uk/login> (School username: furze password: reflect. Students are given their own portal login details in September)  
<https://ukmt.org.uk/intermediate-challenges/intermediate-mathematical-challenge> - UKMT past papers.  
<https://www.mathsgenie.co.uk/gcse.html> - Revision resources and past papers  
  
Students should bring to all Maths lessons: Pen, Pencil, Ruler, Eraser, Scientific Calculator (we recommend the Casio fx-83GT CW / fx-85GT CW) and laptops.

**How we keep parents informed:**  
*Progress reports are published 4 times per year, in October, November, March and July, with a face-to-face parents' evening in March.*

**How parents can help their child:**  
*Please check that your child regularly completes their personalised SparxMaths home learning, which is set every Monday, and due the following Monday. Encourage them to seek help if they are struggling, but do not answer questions for them as the questions could quickly become too challenging. Please also ensure your child brings the appropriate equipment, including a calculator and laptop, to every maths lesson.*

| <b>HIGHER TIER: What we study and when:</b> |   |  |   |   |   |   |  |                          |
|---|---|--|---|---|---|---|--|--------------------------|
| <b>Term</b>                                 | <b>Unit, Topic Or Summary Of Work Covered</b> | <b>Knowledge, Understanding &amp; Skills Developed</b>   | <b>ACHIEVE / Personal Development Focus</b>                                     | <b>How The Work Is Assessed</b>   | <b>Careers Links</b>  |   |  |                          |
| <b>1</b>                                    | Graphs  | Linear graphs – Rates of change – Real-life graphs – Quadratic, cubic & reciprocal graphs  | All lessons offer opportunities for students to demonstrate our ACHIEVE values. | Unit assessment   |   |   |  |                          |
|   | <b>2</b>                                      | Area & volume  |   | Perimeter & area - Units & accuracy – Prisms – Circles - Sectors – Cylinders – Spheres – Pyramids - Cones | PPE 1 (non-calculator)  |   |  |                          |
| Transformations & constructions             |   | 3D solids – Reflection – Rotation - Enlargement – Bearings - Scale drawings – Constructions - Loci                               |   | Combined unit assessment  | Graphics designer. Navigation. Pilot. Architect.                                |   |  |                          |
| <b>3</b>                                    | Equations & Inequalities                      | Quadratic equations - Simultaneous equations - Linear inequalities   |   | All lessons offer opportunities for students to demonstrate our ACHIEVE values.                           | Unit assessment   | Sport statistical analyst. Gaming. Trading.                                     |  |                          |
|   | Probability                                   | Combined events - Mutually exclusive events - Experimental probability - Tree diagrams - Conditional probability - Venn diagrams |   |   |   |   |  |                          |
| <b>4</b>                                    | Multiplicative reasoning                      | Growth & decay - Compound measures - Ratio & proportion  |   |   | All lessons offer opportunities for students to demonstrate our ACHIEVE values. | PPE 2 (non-calculator)<br>PPE 3 (calculator)                                    |  |                          |
|   | Similarity & congruence                       | Geometric proof – Congruence – Similarity and 3D solids  |   |   |   |   |  |                          |
| <b>5</b>                                    | Trigonometry                                  | Trig graphs – Areas - Sine & cosine rule - 3D problems - Transforming trig graphs  |   |   |   | All lessons offer opportunities for students to demonstrate our ACHIEVE values. | PPE 4 (calculator)                                       | Engineering.             |
|   | <b>6</b>                                      | Further statistics   |   |   |   |   | Sampling - Cumulative frequency - Box plots - Histograms | Combined unit assessment |
| Equations & graphs                          |   | Simultaneous equations - Inequalities - Quadratic & cubic graphs - Iteration   |   |   |   |   |  |                          |

| <b>FOUNDATION TIER: What we study and when:</b> |   |  |   |  |                                   |
|---|---|--|---|--|-----------------------------------|
| <b>Term</b>                                     | <b>Unit, Topic Or Summary Of Work Covered</b> | <b>Knowledge, Understanding &amp; Skills Developed</b>                         | <b>ACHIEVE / Personal Development Focus</b>                                     | <b>How The Work Is Assessed</b>  | <b>Careers Links</b>              |
| <b>1</b>  | Angles  | Angles in parallel lines – Angles in polygons                                  | All lessons offer opportunities for students to demonstrate our ACHIEVE values. | Unit assessment  | Engineering. Tiler.               |
|   | Averages & range                              | Mean – Mode – Median – Range - Averages from frequency tables - Sampling       |   | PPE 1 (non-calculator)   | Market Research.                  |
| <b>2</b>  | Perimeter, area & volume                      | Triangles – Quadrilaterals - Compound shapes - Surface area - Volume of prisms |   | Combined unit assessment   | Designer. Construction            |
|   | Graphs  | Linear graphs - Real-life graphs   |   | Unit assessment  | Fabric designer. Tiler.           |
| <b>3</b>  | Transformations                               | Translation – Reflection – Rotation - Enlargement                              |   | PPE 2 (non-calculator)<br>PPE 3 (calculator)   | Construction, Landscape gardening |
|   | Ratio & proportion                            | Ratio & measures – Proportion graphs – Proportion problems                     |   |  |                                   |
| <b>4</b>  | Right-angled triangles                        | Pythagoras' theorem - Trigonometry   |   | PPE 4 (calculator)   | Gaming.                           |
|   | Probability                                   | Two events – Experimental - Venn diagrams - Tree diagrams                      |   | Combined unit assessment   | Financial planner.                |
| <b>5</b>  | Multiplicative reasoning                      | Percentages - Growth & decay - Compound measures - Direct & inverse proportion |   |  |                                   |
|   | <b>6</b>                                      | Constructions, loci & bearings   |   | 3D solids, Plans & elevations, Accurate drawings, Scale drawings - Constructions, Loci, Bearings | Architect. Pilot.p                |