

**Department Information:**

Students have 8 one-hour lessons per fortnight. All students follow the National Curriculum which is supported by differentiated textbooks and resources to ensure students are challenged and supported appropriately. Students are assessed regularly and time in class is given for students to address any areas for development. The school subscribes to Sparx Maths, and this is set weekly for students to engage in independent study outside of lessons.

**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:**

Students should build on Year 7 Maths and make connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge in science, geography, computing and other subjects.

The course content covers:

Number,  
Algebra,  
Ratio, proportion and rates of change,  
Geometry and measures,  
Probability,  
Statistics.

**Resources:**

<https://www.pearsonactivelearn.com/app/home> - online Maths Progress 2 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://play.ttrockstars.com/auth/school/student/1586> - Times Tables practice. (Username: MyMaths portal 4 numbers; password: MyMaths portal 3 letters)  
[www.nrich.org.uk](http://www.nrich.org.uk) – Enrichment resources for problem solving.  
<https://ukmt.org.uk/junior-challenges/junior-mathematical-challenge> -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, December, April 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>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>	Number	Divisibility and division - Calculating with negative numbers - Powers, roots, brackets - Multiples, factors	All lessons offer opportunities for students to demonstrate our ACHIEVE values.	Unit assessment	
	Statistics, graphs and charts	Pie charts, tables - Stem and leaf diagrams - Comparing data - Scatter graphs - Misleading graphs		Cumulative assessment to include Area & Volume from Y7.	Christmas home learning: Conduct a survey on use of maths in different careers and display results using statistical diagrams.
<b>2</b>	Expressions and equations	Algebraic powers - Expressions and brackets - Factorising - Equations		Unit assessment	
	Real life graphs	Conversion graphs - Distance – time graphs - Line graphs - Real-life graphs - Curved graphs		Unit assessment	
<b>3</b>	Decimals and ratio	Ordering decimals and rounding - Calculations with decimals - Ratio and proportion with decimals		Cumulative assessment of all content to date.	Journalism for significant figures.
	Lines and angles	Quadrilaterals - Alternate angles and proof - Angles in parallel lines - Exterior and interior angles - Geometric problems		Unit assessment	Digital marketing and design.
<b>4</b>	Calculating with fractions	Ordering - Adding, subtraction - Multiplying, dividing - Calculating with mixed numbers		Unit assessment	
	Straight line graphs	Direct proportion on graphs - Gradient - Equations of straight lines		Unit assessment	
<b>5</b>	Percentages, decimals and fractions	Fractions and decimals - Equivalent proportions - Percentages		Cumulative assessment of all content to date.	
<b>6</b>	Indices and standard form	Indices - Standard form		Formative tasks in class	Scientist, astronomer
	Expressions and formulae	Equations - Formulae -Index Laws -Expanding double brackets		Formative tasks in class	