	Year 8 Mathematics					
	Autumn Term 1	**Autumn Term 2**	**Spring Term 1**	**Spring Term 2**	**Summer Term 2**	**Summer Term 2**
BIG Question ***Curriculum content*** **Please log into SPARX Maths to support your child.**	**How can proportional reasoning help us understand and solve real-world problems?** • Understanding ratios. • Using proportion. • Working with fractions. • Scaling and maps • Graphs and geometry links	**How can graphs, coordinates, and data help us understand the world around us?** • Working with coordinates • Understanding straight-line graphs. • Interpreting data. • Scatter graphs and correlation. • Rounding and estimation.	**How can algebraic expressions, equations, and inequalities help us solve problems?** • Building expressions. • Solving equations. • Understanding inequalities. • Using algebra with numbers. • Recognising algebraic structures.	**How can rules, powers, and percentages help us describe patterns, compare quantities?** • Working with sequences. • Understanding percentages. • Fractions, decimals & percentages fluency. • Using indices. Standard form.	**How can angle facts and shape properties, help us describe and analyse geometric figures accurately?** • Angle rules. • Properties of shapes. • Area and perimeter. • Constructions. Transformations.	**How can we collect, represent, and analyse data to make reliable conclusions?** • Collecting data. • Representing data. • Using average.. • Comparing data. • Evaluating data.
10 key words	1. Ratio 2. Proportion 3. Unitary method 4. Scale factor 5. Improper Fraction 6. Mixed Number 7. Reciprocal 8. Similarity 9. Gradient 10. Conversion graph	1. Coordinate 2. Quadrant 3. Gradient 4. Linear graph 5. Correlation 6. Line of best fit 7. Frequency table 8. Grouped data 9. Significant Figure 10. Estimation	1. Expression 2. Equation 3. Inequality 4. Identity 5. Bracket 6. Factorise 7. Expand 8. Unknown 9. Formula 10. Number line	1. Sequence 2. Term 3. Nth term 4. Percent 5. Percentage change 6. Multiplier 7. Index / power 8. Negative index 9. Standard form 10. Scientific notation	1. Angle 2. Alternate angles 3. Corresponding angles 4. Co-interior angles 5. Exterior angle 6. Interior angle 7. Transformation 8. Reflection 9. Rotation 10. Translation	1. Mean 2. Median 3. Mode 4. Range 5. Outlier 6. Frequency 7. Grouped data 8. Pictogram 9. Pie chart 10. Misleading graph
Catholic social teaching Link	Fairness and sharing	Stewardship	Truth and clarity	Stewardship	Truth and clarity	Community and responsibility
Careers Link	Practical problem-solving careers.	Data-driven careers Technical and design careers	STEM and technical careers. Business careers	Scientific and technical careers	Digital and creative careers Construction careers	Data-focused careers Public services and media

Ways to enrich the Year 8 curriculum at home…

- Be in charge of the budget for the weekly shop. Can you find the best bargains?
- Find examples of graphs in the media. What are they showing? Why are they being used?
- Explore how algebra is used within computer programming.