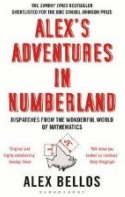
The Bemrose School Curriculum

Curriculum Overview: Year 8 Maths https://whiterosemaths.com/resources?year=year-8

The school uses the White Rose Maths scheme in math in Year 8

Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Proportionality Ratio and Scale Multiply and Divide fractions	Representation Cartesian plane Representing data Probability	Algebraic Techniques Brackets, equations & inequalities Sequences Indices	Developing number Fractions and Percentage Standard index form Number sense	Developing geometry Angles in lines and polygons Area of trapezium and circle Reflections	Data Handling Cycle Measures of location and dispersion
Links to prior learning Area, Equations, improper fractions, fractions of an amount **Stretch and Challenge Enquiry** How do you write ratio 1:n? What do direct proportion graphs look like? Can you use the rules to multiple and divide fractions when they involve algebra?	**Links to prior learning** One and two step equations Venn diagrams **Stretch and Challenge Enquiry** How do you calculate gradient of a slope? What can non-linear graphs look like? How can the Product rule save you time counting all the possible outcomes?	**Links to prior learning** Direct numbers Solve equations **Stretch and Challenge Enquiry** How do expand more than 2 brackets? How do you solve equations with inequalities? How do you work out the 1000th term in a sequence quickly?	**Links to prior learning** FDP equivalence Calculations of fractions Compare ratios with FDP **Stretch and Challenge Enquiry** How do you find the original value if you are given the discounted price? How can you work with square roots without a calculator? When using powers can the answer be less than one? How do you indicate the possible error in your answer?	**Links to prior learning** Properties of shape Equations of straight lines **Stretch and Challenge Enquiry** How do you calculate area of circles without a calculator? What is special about diagonal lines in quadrilaterals?	**Links to prior learning** Find the range Algebraic substitution Links to data collection in other subjects **Stretch and Challenge Enquiry** How do you calculate the median from table of values? How do represent values in a bar chart by using area?

Equipment Needed	**Wider Reading**	**Family activities**
Scientific calculator Pair of compasses Ruler Pencil Protractor **Homework** Smart Phone, Tablet, Laptop, Desktop, Wi-Fi Username: Full school email address Password: bemrose https://vle.mathswatch.co.uk/vle/	Alex's Adventures in Numberland by Alex Bellos  The world of maths can seem mind-boggling, irrelevant and, sometimes, boring. This groundbreaking book reclaims maths from the geeks.	Maths games https://nrich.maths.org/9465 https://nrich.maths.org/1235 Coordinates Alien Attack - Mathsframe https://www.topmarks.co.uk/maths-games/hit-the-button https://mathsframe.co.uk/en/resources/resource/470/Angle-Alien-Attack Scheme of Work https://whiterosemaths.com/resources?year=year-8