The Bemrose School Curriculum

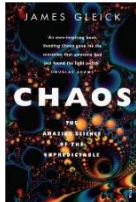## Curriculum Overview: Year 10 Maths https://whiterosemaths.com/resources?year=year10

The school uses the White Rose Maths scheme in math in Year 10

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Similarity Trigonometry	Equations and inequalities Simultaneous equations	Angles and bearings Working with circles Vectors	Ratios and fractions Percentages and interest Probability	Delving into data Non calculator methods	Types of number and sequences Indices and roots Manipulating expressions
Links to prior learning Enlargement Angles in parallel lines Pythagoras **Stretch and Challenge Enquiry** Area/Volume of similar shapes Trigonometry in 3D shapes Sine rule/Cosine rule	**Links to prior learning** Form and solve equations Linear graphs Derive related facts **Stretch and Challenge Enquiry** Representing inequality solutions graphically Simultaneous equations involving quadratics	**Links to prior learning** Scale diagrams Cardinal directions and related angles Parts of a circle **Stretch and Challenge Enquiry** Bearings using sine/cosine rule Circle theorems Vector proofs	**Links to prior learning** Compare and share ratios Link ratios to fractions, graphs and scales. Convert fractions, decimals and percentages. Percentages (Increase and decrease) (Percentage change) Basic probability Calculate with fractions **Stretch and Challenge Enquiry** Ratio in area/volume problems Iteration Conditional probability	**Links to prior learning** Two-way tables Pie charts Averages Scatter graphs Line of best fit Four operations **Stretch and Challenge Enquiry** Constructing a stratified sample Histograms and Cumulative frequency Surds Upper/Lower bounds	**Links to prior learning** Factors, multiples and primes. HCF and LCM Finding the nth term (linear) Square/Cube numbers Standard form Simplify expressions **Stretch and Challenge Enquiry** Finding the nth term of a quadratic sequence Fractional indices Calculate with algebraic fractions

Equipment Needed	Wider Reading	Family activities
Scientific calculator Pair of compasses Ruler Pencil Protractor **Homework** Smart Phone, Tablet, Laptop, Desktop, Wi-Fi Sparx Maths	### Chaos by James Gleick Chaos is what happens when the behaviour of a system gets too complicated to predict; the most familiar example is the weather, which apparently cannot be forecast accurately more than five days ahead. This book tells the story so far in the study of this new field of Physics.	Maths games https://nrich.maths.org/9465 Try online GCSE papers at https://www.onmaths.com/ https://www.mathsgenie.co.uk/AQApapers.html A guide to parents https://www.aqa.org.uk/maths-digest/maths-blog/supporting-students-a-parents-perspective Maths Resources https://mathsbot.com/gcseMenu https://corbettmaths.com/contents/ https://gridalgebra.com/free