

Mathematics

Year 8 2022-2023

Topics studied:

Autumn 1	Multiplication/Division of Decimals
	FDP (1)
	FDP (2)
	Percentages
	Simplifying ratios inc. conversion to fractions
	Sharing into a ratio
	Ratio problems including FDP

Spring 1	Rearranging formulae
	Linear equation with unknowns on both sides
	Construct and solve linear equations
	Construct and solve linear equations - properties of shapes
	Angles in parallel lines

Summer 1	Probability 1
	Probability 2
	Circumference of circles
	Area of circles
	Properties of 3D shapes

Autumn 2	Expressions and equivalence
	Substitution into formulae
	Expanding pairs of brackets
	Factorisation - common factors
	One step/Two step equations
	Autumn Review

Spring 2	Bearings
	Scale conversions
	Percentage change
	Simple interest
	Spring Review

Summer 2	Volume of shapes
	Plans and elevations
	Constructions
	End of year Assessment
	Project
	Project

Keywords that students must know, and be able to spell, by the end of the course:

Rational, Irrational, Terminating, Recurring, Equivalence, Convert, Interpret, Similar, Associated, Equal, Preferred, Identify, Amount, Part, Compound, Express Quantities, Share, Reduce, Simplest, Part, Whole, Ratio, Proportion, Rate, Concentration, Unit, Complex

Expression, Term, Formula, Equation, Substitute, Replace Scientific, Multiple Expand, Binomial, Coefficient, Term, Factorise, Algebraic, Similar, Factor Construct, Unknown, Fractional, Subject

Change, Rearrange, Formula, Variable Linear, Equation, Unknown, Balance Construct, Solve, Intersection, Term Form, Properties, Geometric, Solve, Parallel, Alternate, Corresponding, Co-Interior

Bearing, Measure, Route, Direction, Imperial, Scale, Produce, Metric Change, Percentage, Original, New Interest, VAT, Annum, Rate

Chance, Probability, Scale, Theoretical, Experimental, Expected, Outcome, Frequency, Radius, Diameter, Circumference, Arc, Sector, Area, Part, Section, Vertex, Edge, Face, Surface

Volume, Estimate, Compound, Convert Plans, Elevations, Match, Analyse Construct, Bisector, Perpendicular, Segment

Subject specific websites to support revision and independent learning:

Mymaths (lessons, homework and games):

www.mymaths.co.uk BBC Bitesize (revision and tests):

www.bbc.co.uk/education/subjects/zqhs34j Subtangent (revision, games and investigations): www.subtangent.com/maths/index.php Nrich (games and puzzles):

www.nrich.maths.org.uk/public/index.php Counton (lots of games):

www.counton.org/games/ Sums (games):

www.sums.co.uk/playground.htm Mathsapps (find apple maths apps):

www.mathsapps.com/ Brainbashers (games and puzzles):

www.brainbashers.com/puzzles.asp Funbrain (puzzles & games):

www.funbrain.com/ Hellam (puzzles & games):

www.mathematics.hellam.net/

www.mathsgenie.co.uk

www.mathsbot.com

To help your child this year you can:

The following workbooks and revision guides are available for you to purchase on Parent pay:

Key Stage Three Mathematics Higher Level: The Workbook (includes answers) by CGP

Key Stage Three Mathematics Foundation Level: The Workbook (includes answers) by CGP

Key Stage Three Mathematics Higher Level: The Study Guide by CGP

Key Stage Three Mathematics Foundation Level: The Study Guide by CGP MathsWatch Disc

You can also access additional Maths resources via the school website