Autumn Term





Year 8







W.C.	04/09	11/09	18/09	25/09	02/10	09/10		30/10	06/11	13/11	20/11	27/11	04/12	11/12	18/12
Blocks	RATIO AND SCALE			MULTIPL	MULTIPLY DIVIDE FRACTIONS			COORDINATES AND LINES			DCP1	REPRESENTING DATA AND PROBABILITY		A AND	
Term One	ratio representing Understand and use ratio notation Use bar modelling to represent ratios Write ratios in their simplest integer form	Work with equivalent ratios (1:n and m:n from WRM) Divide an amount into a given ratio Solve problems involving dividing into ratios	Use ratios when given one of the shares Ratio given one part or the difference Write ratios as fractions and vice versa	Understand and use the unitary method Solve problems involving direct proportion Use direct proportion with recipes Use a conversion graph	Convert between currencies Explore similar shape and scale factors Interpret scale diagrams Interpret and use map scales	Recap mixed to improper conversions and simplify Multiply integers by a fraction Find the product of pairs of unit fractions Find the product of any given pair of fractions	H L F T E R M	Divide an integer or fraction by a unit fraction Use the reciprocal to divide by any given fraction Divide any pair of fractions (inc. mixed for some) Multiply and divide frac's fluently inc. mixed numb's for some	Plot and read coordinates in all four quadrants Solve problems with coordinates e.g. complete shapes	Explore/plot/ recognise vertical lines (x=a) Explore/plot/ recognise horizontal lines (y=b) Recap one/two step substitute – show in table form too! Plot and recognise y=x and lines in the form y = kx	Plot graphs in the form y = x + a Plot graphs with a neg' gradient (y=-kx y=a-x) Plot graphs in the form y = mx + c	Y7 Revision for Autumn Term Assessment Y8 Revision for Autumn Term Assessment DCP Core & Higher papers Plot bivariate data using a scatter graph	Understand and describe linear correlation Estimate values using a scatter graph and a LOBF Types of data: quantitative vs qualitative Types of data: discrete vs continuous	Read/interpret ungrouped frequency tables Read/interpret grouped discrete data Read/interpret grouped continuous data Complete and interpret two-way tables Probability from two-way tables	Sample space diagrams and probability Probability from venns and freq trees Probability from venn diagrams (sorting values type, not frequencies)

W.C.	01/01	08/01	15/01	22/01	29/01	05/02		19/02	26/02	04/03	11/03	18/03	25/03	
Blocks	BRACKETS	EQUATIONS IN	EQUALITIES	INDICES AND STANDARD FORM				FRACTIC	IS AND PERCENTAGES		DCP2	SEQUENCES AND NUMBEF		E
Term Two	Recap – forming algebraic expressions Recap – simplify by collecting like terms Expand a single bracket	Expand multiple brackets and simplify Factorise an expression into a single bracket Further factorisation – harder expressions Solve basic two-step equations (ax + b = c)	Solve further two-step equations Solve equations including with brackets Understand and describe inequalities Solve simple inequalities	Evaluate powers and roots Use the addition law for indices Use the subtraction law for indices	Simplify exp's using indices (multiplication) Simplify expressions using division Add/subtract expressions with indices Investigate positive and negative powers of ten Convert number greater than one into standard form	Convert small numbers (0-1) into standard form Convert from standard form to ordinary numbers Compare and order numbers in standard form Multiply/ divide numbers in standard form	L F T E R M	Convert between fractions and percentages Convert FDP fluently Recap – fractions of amounts Express one amounts as a fraction of another amount	Recap – simple percentages of amounts Increase or decrease by a percentage (non-calculator) Percentages of amounts using a calculator (with multipliers) Percentage increase using a multiplier	Percentage decrease using a multiplier Express one amounts as a percentage of another Calculate the percentage change Solve mixed problems involving percentages	Y7 Revision for Spring Core Assessment Y8 Revision for Spring Core Assessment DCP Core & Higher Papers	Recap: describe and continue linear and non-linear sequences Generate a sequence from a given worded rule Generate a sequence from a given algebraic rule Find the nth term of an increasing linear sequence	Find and use the nth term of a sequence Round to 1SF and estimate a calculation Order of operations including powers Convert metric units of length, mass, capacity	S T E R

W.C.	15/04	22/04	29/04	06/05	13/05	20/05		03/06	10/06	17/06	24/06	01/07	08/07	15/07	22/07	
Blocks	ANGLES			AREA AND CIRCLES			H	LSR	DATA HANDLING CYCLE			DCP3	MEASURES OF LOCATION		ATION	C H P
Term One	Recap – angle types and angle notation Recap angles at a point and on a straight line Recap angles in triangles and quadri-latera ls Angles in parallelog's and trapezia Co-Interior Angles (linked to prev lesson)	Explore angles in parallel lines – alternate angles Correspond-i ng angles Find missing angles in parallel lines (all three rules mixed) Multi-step angles in parallel lines	Interior and exterior angles inc. sum of exterior Sum of interior angles in polygons Recap – area of rectangles and parallel's Calculate the area of triangles	Area of compound shapes Calculate the area of a trapezium	Further area problems inc. rect/para/tri/ trapezia Perimeter of shapes inc. compound Identify and recognise the parts of a circle Calculate the circumf' of a circle Solve problems involving circumfer'	Area of a circle (in terms of pi, non-calc) Area of a circle (calc) Solve problems involving circle area	F F R M	Recognise line symmetry Reflect in a given horiz/ vertical line Reflect in a line given by an equation $x = a \ y = b$ Reflect a shape in a diagonal line	Recap: data collection charts e.g. tally/ frequency Criticise and design questionnaires Numeracy/ revision for final Arithmetic Assessment	Draw and interpret pictograms Draw/interpret simple bar charts and dual Interpret dual and composite bar charts	Interpret pie charts Compare sets of data using pie charts Draw accurate pie charts for data #1 Draw accurate pie charts for data #2	Y7 Revision for Summer Term DCP3 Assessment Y8 Revision for Summer Term DCP3 Assessment SUMMER DCP Core & Higher papers Understand the mode value inc. tables and modal class	Recap - Median of listed data Calculate the mean of listed data Find the range of data Mixed practice mean/median /mode/range	Solve problems involving the mean Compare data using averages and the range Mean from an ungrouped frequency table Mean from a grouped frequency table	Consolidation on Measures of location	I S T M A S