

	Stage 7	
	Topics	
Half Term 1	Number System 1	Recall prime numbers up to 50 Know the meaning of 'highest common factor' and 'lowest common multiple' Understand the use of notation for powers Prime factor Decomposition Add / subt / mult / divide all integers Carry out Divisibility tests for 2, 3, 4, 5, 6, 8, 9 and 10.
	Number System 2	Negative Numbers Order fractions, decimals and negative numbers Use inequality symbols to compare numbers Make correct use of the symbols = and \neq
	Calculating 1	Add / subt / mult / divide all integers Round numbers to a given degree Use the order of operations, including brackets Use a range of checking e.g. - estimating - inverse operations
	Coordinates & Graphs 1	Plot points in all 4 quadrants Plot equations of the form; $y = mx + c$
Half Term 2	Algebra 1	Know the meaning of expression, term, formula, equation, function Know basic algebraic notation (the rules of algebra) Collecting like terms Expand Single Brackets Substitute positive numbers into expressions and formulae
	Shape S7	Know the vocabulary of 3D shapes Visualise a 3D shape from its net Recall the names and shapes of special triangles and quadrilaterals Know the meaning of a diagonal of a polygon Know the properties of the special quadrilaterals (including diagonals) Apply the properties of triangles to solve problems Apply the properties of quadrilaterals to solve problems
	Sequences 1 S7	Use a term-to-term rule to generate a linear sequence Use a term-to-term rule to generate a non-linear sequence Find the term-to-term rule for a sequence
	Constructions 1 S7	Perpendicular bisector of a line Bisect an angle Construct SSS triangle Construct SAS and ASA triangles using rule and protractor
	FDP 1 S7	Write a fraction in its lowest terms by cancelling common factors Convert between mixed numbers and top-heavy fractions Understand that a percentage means 'number of parts per hundred' Write a percentage as a fraction Write a quantity as a percentage of another Convert between Fractions, Decimals and Percentages
erm 3	Probability S7	Interpret results of an experiment. Use language of probability. Compare theoretical and experimental probabilities and; Find simple Probabilities
	Proportion S7	Simplify a ratio by cancelling common factors Find the value of a 'unit' in a division in a ratio problem Express correctly the solution to a division in a ratio problem Use basic Direct proportion using conversion graphs
	Measures S7	Use a ruler to accurately measure line segments to the nearest millimetre Use a protractor to accurately measure angles to the nearest degree Convert fluently between metric units of length, mass, volume/ capacity, time, money

Half t	Geometry 1 S7	Identify and use angles rules (Supplementary, Complementary, Vertically Opposite) Find missing angles in triangles Use knowledge of angles to calculate missing angles in geometrical diagrams Explain reasoning using vocabulary of angles
	Statistics 1 S7	Know the meaning of categorical and discrete data Construct and interpret pictograms (bar charts, tables) and know their appropriate use Construct and interpret comparative bar charts Interpret pie charts and know their appropriate use Construct pie charts when the total frequency is not a factor of 360 Choose appropriate graphs or charts to represent data Construct and interpret vertical line charts
Half Term 4	Statistics 1 S7	CONTINUING FROM HALF TERM 3
	Checking & Est S7	Approximate by rounding to any number of decimal places Know how to identify the first significant figure in any number Use estimation to predict the order of magnitude of the solution to a (decimal) calculation Estimate calculations by rounding numbers to one significant figure
	FDP 2 S7	Apply the four operations to fractions Use calculators to find a percentage of an amount using multiplicative methods Identify the multiplier for a percentage increase or decrease Use calculators to increase (decrease) an amount by a percentage using multiplicative methods Compare two quantities using percentages Know that percentage change = $(\text{actual change} \div \text{original amount}) \times 100$ Calculate the percentage change in a given situation, including percentage increase / decrease
Half Term 5	Algebra 2 S7	Solve one-step equations when the solution is a whole number (fraction) Solve two-step equations (including the use of brackets) when the solution is a whole number Solve two-step equations (including the use of brackets) when the solution is a fraction Check the solution to an equation by substitution Solve basic problems using graphs and equations. i.e. show that you can solve $y = 2x - 3$ using a Make the connection that solving an equation is actually finding the point where 2 line intercept. Rearrange simple formulae where the unknown subject appears once. \uparrow
	Area and Volume S7	Know the formulae for rectangles, triangles, parallelogram Find missing lengths in 2D shapes when the area is known Calculate the area of a trapezium Understand the meaning of surface area Find the surface area of cuboids (including cubes) when lengths are known Find missing lengths in 3D shapes when the volume or surface area is known
Half Term 6	Transformations S7	Write the equation of a line parallel to the x-axis or the y-axis Draw a line parallel to the x-axis or the y-axis given its equation Identify the lines $y = x$ and $y = -x$ Draw the lines $y = x$ and $y = -x$ Carry out a reflection in a diagonal mirror line (45° from horizontal) Describe a translation as a 2D vector Understand the concept and language of rotations Carry out a rotation using a given angle, direction and centre of rotation Describe a rotation using mathematical language
	Statistics 2 S7	Understand the mode and median as measures of typicality (or location) Find the mode of set of data Find the median of a set of data Find the median of a set of data when there are an even number of numbers in the data set

Use the mean to find a missing number in a set of data

Calculate the mean from a frequency table

Find the mode from a frequency table

Find the median from a frequency table

Understand the range as a measure of spread (or consistency)

Calculate the range of a set of data

Analyse and compare sets of data

Appreciate the limitations of different statistics (mean, median, mode, range)