Y8 Autumn

A-B1 – Multiplying and dividing fractions	A - B2 – Ratio and scale	A - B3 – Multiplicative change	A – B4 – Algebraic techniques	A - B5 – Representing data	A - B6 – Tables and probability
- Simplify / find equivalent fractions - Multiply / divide a fraction by an integer - Reciprocals -Multiply / divide proper fractions and mixed numbers - Algebraic fractions (H)	- Ratio notation - Problems involving ratios one part known - Sharing into a ratio - Problems involving ratio difference known - Simplifying ratio (inc 1:n H) - Compare fractions and ratios	- Direct proportion - Conversion graphs - Currency conversion - Similar shapes - Scale drawings / maps	- Collecting like terms with indices - Laws of indices - Generating a sequence - Find the n^{th} term - Expand brackets - Factorise - Expand double brackets (H)	- Scatter graphs (inc correlation and line of best fit) - Types of data - Tally charts and tables - Read and interpret frequency tables (ungrouped and grouped data) - Two way tables	- Single event probability - Sample space diagrams - Probability from two way tables - Probability from Venn diagrams - Product rule

Y8 Spring

Sp - B1 – Working in the Cartesian plane	Sp – B2 – Fractions and percentages	Sp – B3 – Brackets, equations and inequalities	Sp - B4 – Standard form	Sp - B5 – Applying number
- Coordinates in 4 quadrants - Midpoint - Lines parallel to the axis and y=x - Plot graphs (builds up to y = mx+c form) - Sequences and links to graphs - Gradient of a line - Recognising the equation of a line from the graph	- Convert between FDP - Fraction or percentage of amount - Percentage increase and decrease with multipliers - Percentage change - Percentage problems - Finding the original when given a percentage (H)	- Recaps prior algebra - Directed number with algebra eg collecting like terms. - Solve equations 2 step, brackets, unknowns both sides - Solve inequalities 2 step, brackets, unknowns both sides - Identify formulae, expressions, identities, equations - Form and solve (H)	- Convert large and small numbers between ordinary and standard form - Add and subtract in standard form - Multiply and divide in standard form - Use a calculator for standard form - Negative indices (H)	- Rounding including to decimal places and significant figures - Estimating - Error intervals (H) - Order of operations - Money calculations - Metric measures - Time problems

Y8 Summer

Su - B1 – Angles in parallel lines and polygons	Su - B2 – Area and perimeter of 2D shapes	Su - B3 – The data handling cycle	Su - B4 – Measures of location	Data project until end of year
- Basic angles rules - Angles problems involving equations - Angles rules for parallel lines - Quadrilateral properties - Triangle constructions - Complex angles problems - Interior and exterior angles of polygons	- Parts of a circle - Recap area rectangles, triangles and parallelograms - Area of trapezium - Perimeter and area of compound shapes - Area /circumference of circles - Area of a semi-circle / quarter circle	- Statistical enquiries - Criticise questionnaires - Pictograms, bar charts and line graphs - Draw and interpret pie charts - Compare distributions - Misleading graphs - Calculate the range (inter-quartile range (H))	- Calculate the mean, median mode and range for a set of range - Interpret and use averages in a range of contexts - Averages from frequency tables (grouped and ungrouped) - Outliers - Stem and leaf diagrams	