

	Objective Y9 Core
Indices	Find the reciprocal of a number.
	Use index notation for negative integer indices.
	Convert between ordinary and standard index form.
	Calculate with standard index form
Fractions, decimals and percentages	Write numbers as a percentage of another number.
	Calculate percentages of quantities
	Increase or decrease a quantity by a given percentage
	Work out reverse percentage problems
	Calculate percentage change
	Use and understand compound interest and depreciation
Data	Draw and interpret pie charts
	Draw and interpret scattergraphs
	Draw a line of best fit on a scattergraph and describe correlation
	Draw and interpret a time series graph
	Calculate averages from a frequency table
	Estimate the mean from a grouped frequency table
	Find the modal group and group containing the median from grouped data
Measures	Understand and use compound measures with speed/distance and time
	Draw and interpret distance time graphs
Calculations and accuracy	Round to a given number of significant figures
	Estimate answers to calculations
	Find upper and lower bounds
	Use inequality notation to specify error intervals due to rounding
	Use place value to calculate changes to given calculations
	Use a calculator for complex calculations
Simplifying and substituting	Expand simple single brackets
	Factorise single brackets
	Rearrange formula that include brackets, fractions and square roots.
	Equate co-efficients in basic identities
Assessment Week	Revision Lesson
	Advent Assessment
	Marking Lesson
Simplifying and substituting	Expand quadratics
	Factoring quadratics in DOTS form
	Factorise quadratics of the form $ax^2 + bx$
	Apply and use the laws of indices using algebraic terms
	Substitute numbers into more complex formulae
Ratio and proportion	Write ratios as fractions of the whole and fractions of each part
	Divide quantities by simple ratios given the whole, part or difference
	Solve non-standard questions when sharing a ratio given whole, part or difference
	Calculate maximum quantity problems

Pythagoras and Trigonometry	Use Pythagoras' Theorem to calculate missing lengths in right angled triangles
	Use Pythagoras' Theorem to calculate the distance between co-ordinates
	Apply Pythagoras' theorem to solve problems
Forming and solving equations	Solve linear equations with unknowns on both sides
	Solve linear equations with unknowns on both sides including brackets
	Solve simple simultaneous equations with elimination (no multiplication required)
	Factorise and solve quadratics of the form $ax^2 + bx + c = 0$ where $a=1$
Lines, angles and shapes	Solve problems using alternate, corresponding and co-interior angles
	Know and apply the special properties of squares, rectangles, trapeziums, parallelograms, rhombus, and kites
	Calculate interior and exterior angles in regular polygons
Assessment Week	Revision Lesson
	Lent Assessment
	Marking Lesson
Area	Recognise tangents, arcs, sectors, segments, radii and diameters in circle
	Calculate the area and circumference of a circle
	Calculate the area of sectors and lengths of arcs
Probability	Complete and use two way tables
	Complete and use frequency trees
	Represent probabilities using Venn diagrams
	Identify regions on a Venn diagram using intersect, union and complement notation
	List outcomes systematically
	Use the product rule for counting
Volume	Calculate the volume and surface area of triangular prisms and other prisms
	Calculate the volume and surface areas of cylinders
Sequences, functions and graphs	Plotting linear graphs (can be copied over from extension)
	Use $y = mx + c$ to identify parallel lines (can be copied over from extension and altered)
	Find the equation of a line through two points or one point with a given gradient (can be copied over from extension)
	Plot quadratic functions (can be copied over from extension)
Assessment Week	Revision Lesson
	Pentecost Assessment
	Marking Lesson
Inequalities	Evaluate the solution set of single and double bounded inequalities
	Represent sets of solutions on a number line
	Solve linear equations with an unknown on one side
	Solve linear equations with an unknown on both sides
	Draw and recognise the nets of simple solids

Constructions and Loci	Draw 3D representations on isometric paper
	Draw and recognise the plans and elevations of 3D objects
	Construct a triangle given SAS ,ASA, SSS and RHS
	Recognise and use similarity and congruence
	Use similarity to find missing lengths
	Draw and measure bearings
	Use map scales to find distances
	Construct the perpendicular bisector of a line and an angle
	Construct 30° , 60° and 120° angles
	Solve simple loci problems