

Number & Algebra

	Achievement Standard	Content Descriptor – the student will...	Term 1	Term 2	Term 3	Term 4
Number and Place Value	By the end of Year 7 students solve problems involving the comparison, addition & subtraction of integers . They make connections between whole numbers and index notation and the relationship between perfect squares and square roots .	Investigate index notation and represent whole numbers as products and powers of prime numbers				
		Investigate and use square roots of perfect square numbers				
		Compare, order, add and subtract integers				
		Apply the associate, commutative and distributive laws to aid mental and written computation				
Fractions & Decimals: Real Numbers	By the end of Year 7 students solve problems involving percentages and all four operations with fractions and decimals . Students use fractions, decimals and percentages, and their equivalences . They express one quantity as a fraction or percentage of another .	Compare fractions using equivalence. Locate and represent fractions as mixed numerals on a number line				
		Solve problems involving addition and subtraction of fractions, including those with unrelated denominators				
		Multiply and divide fractions and decimals using efficient written strategies and digital technologies				
		Express one quantity as a fraction of another, with and without the use of digital technologies				
		Round decimals to a specified number of decimal places				
		Connect fractions, decimals and percentages and carry out simple conversations				
		Finds percentages of quantities and express one quantity as a percentage of another, with and without digital technologies				
Recognise and solve problems involving simple ratios						
Money & Financial Mathematics	By the end of Year 7 students compare the cost of items to make financial decisions	Investigate and calculate 'best buys', with and without digital technologies				
Patterns & Algebra	By the end of Year 7 students represent numbers using variables . They connect the laws and properties for numbers to algebra . Students solve linear equations and evaluate algebraic expressions after numerical substitution .	Introduce the concept of variables as a way of representing number using letters				
		Create algebraic expressions and evaluate them by substituting a given value for each variable				
		Extend and apply the laws and properties of arithmetic terms and expressions				
Linear & Non-linear Relationships	By the end of Year 7 students interpret simple linear representations and model authentic information . Students assign ordered pairs to given points on the Cartesian plane .	Given coordinates, plot points on the Cartesian plane, and find coordinates for a given point				
		Solve simple linear equations				
		Investigate, interpret and analyse graphs from authentic data				

Statistics & Probability

		Achievement Standard	Content Descriptor – the student will...	Term 1	Term 2	Term 3	Term 4
Chance		By the end of Year 7 students determine the sample space simple experiments with equally likely outcomes and assign probabilities to those outcomes.	Construct sample spaces for single-step experiments with equally likely outcomes				
			Assign probabilities to the outcomes of events and determine probabilities for events				
Data interpretation & Representation		By the end of Year 7 students identify issues involving the collection of continuous data. They describe the relationship between the median and mean in data displays. Students calculate mean, mode, median and range for data sets. They construct and compare stem-and-leaf plots and dot-plots.	Identify and investigate issues involving continuous or large count data collected from primary and secondary sources				
			Construct and compare a range of data displays including stem-and-leaf plots and dot plots				
			Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data				
			Describe and interpret data displays and the relationship between the median and mean				

Measurement & Geometry

		Achievement Standard	Content Descriptor – the student will...	Term 1	Term 2	Term 3	Term 4
Using Units of Measurement	Length, Area, Mass & Capacity	By the end of Year 7 students use formulas for the area and perimeter of rectangles and calculate volumes of rectangular prisms. Students classify triangles as quadrilaterals.	Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving				
			Calculate volumes of rectangular prisms				
Shape		By the end of Year 7 students describe different views of three-dimensional objects.	Draw different views of prisms and solids formed from combinations of prisms				
Location & Transformation	Transformation	By the end of Year 7 students represent transformations on the Cartesian plane.	Describe translations, reflections in an axis, and rotations of multiples of 90° on the Cartesian plane using coordinates. Identify line and rotational symmetry.				
Geometric Reasoning	Angles	By the end of Year 7 students solve simple numerical problems involving angles formed by a transversal crossing two parallel lines. Students name the types of angles formed by a transversal crossing a parallel line.	Classify triangles according to their side and angle properties and describe quadrilaterals				
			Demonstrate that the sum of a triangle is 180° and use this to find the angle sum of a quadrilateral				
			Identify corresponding, alternative and co-interior angles when two parallel straight lines are crossed by a transversal				
			Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning				