Lanyon High School

Year 7 — Australian Curriculum: Mathematics

Identify curriculum	**Achievement standard**	By the end of Year 7, students solve problems involving the comparison, addition and subtraction of integers. They make the connections between whole numbers and index notation and the relationship between perfect squares and square roots. They solve problems involving percentages and all four operations with fractions and decimals. They compare the cost of items to make financial decisions. Students represent numbers using variables. They connect the laws and properties for numbers to algebra. They interpret simple linear representations and model authentic information. Students describe different views of three-dimensional objects. They represent transformations in the Cartesian plane. They solve simple numerical problems involving angles formed by a transversal crossing two lines. Students identify issues involving the collection of continuous data. They describe the relationship between the median and mean in data displays. Students use fractions, decimals and percentages, and their equivalences. They express one quantity as a fraction or percentage of another. Students solve simple linear equations and evaluate algebraic expressions after numerical substitution. They assign ordered pairs to given points on the Cartesian plane. Students use formulas for the area and perimeter of rectangles and calculate volumes of rectangular prisms. Students classify triangles and quadrilaterals. They name the types of angles formed by a transversal crossing parallel line. Students determine the sample space for simple experiments with equally likely outcomes and assign probabilities to those outcomes. They calculate mean, mode, median and range for data sets. They construct stem-and-leaf plots and dot-plots.			
Teaching and learning	**Term overview**	**Term 1**	**Term 2**	**Term 3**	**Term 4**
		NUMBER AND ALGEBRA - *Whole numbers, Index notation and squares and square roots* - *Integers: comparison, addition and subtraction* - *Financial mathematics: comparing costs*	**NUMBER AND ALGEBRA** - *Representation of numbers using variables* - *Connect the laws and properties for numbers to algebra* - *Solve simple linear equations and evaluate expressions after substitution* **MEASUREMENT AND GEOMETRY** - *Linear representations and modelling information* - *Assign ordered pairs to given points on the Cartesian plane*	**MEASUREMENT AND GEOMETRY** - *Represent transformations in the Cartesian plane* - *Use of formulas to calculate perimeter and area of rectangles, and volume of rectangular prisms* - *Describe different views of 3D objects* - *Names of types of angles formed by a transversal crossing parallel lines* - *Solve simple numerical problems involving angles formed by a transversal crossing two lines.* - *Classify triangles and quadrilaterals*	**NUMBER AND ALGEBRA** - *Expressing quantities as fraction or percentage of another* - *Fractions, decimals and percentages and their equivalences* - *Solving problems using fractions, decimals and percentages* **STATISTICS AND PROBABILITY** - *Determine sample space for simple experiments with equally likely outcomes and assign probabilities to those outcomes* - *Describe the relationship between median and mean* - *Calculate mean, mode, median and range* - *Identify issues in collecting continuous data* - *Construct stem-and-leaf and dot plots*
	General capabilities and Cross curriculum priorities				

Literacy · Numeracy · ICT capability · Critical and creative thinking · Ethical behaviour · Personal and social capability · Intercultural understanding · Aboriginal and Torres Strait Islander histories and cultures · Asia and Australia's engagement with Asia · Sustainability

Develop assessment	**Assessment**	**Term 1**		**Term 2**		**Term 3**		**Term 4**	
		Week	**Assessment instrument**	**Week**	**Assessment instrument**	**Week**	**Assessment instrument**	**Week**	**Assessment instrument**
		3	Index Notation Test	15	Algebra Test	1	Transformations Assignment	15	Fractions, decimals and percentages Test
		8	Integers Test	18	Cartesian Plane Test	5	Measurement Test	18	Chance and data Assignment
		10	Financial Literacy Assignment	All Semester	Continuous ongoing assessment	9	Shapes and Angles Assignment	All semester	Continuous ongoing assessment
Make judgments and use feedback	**Moderation**	**Term 1**		**Term 2**		**Term 3**		**Term 4**	
		Teachers moderate assessment tasks to ensure consistency of judgments.							