Learning and Assessment Overview

MALANDA STATE HIGH SCHOOL

Year 7 - 2024 — Mathematics

	Unit	Length	Achievement Standards	Assessment	Checkpoints	Due Date
Term 1	Integers & Probability	9 weeks	1.1 – Students represent natural numbers in expanded form and as products of prime factors, using exponent notation. They solve problems involving squares of numbers and square roots of perfect square numbers. Students solve problems involving addition and subtraction of integers. 1.2 – Students list sample spaces for single step experiments, assign probabilities to outcomes and predict relative frequencies for related events. They conduct repeated single-step chance experiments and run simulations using digital tools, giving reasons for differences between predicted and observed results.	Exam (Integers) Project	- Issue date: 13/03/24 Progressive checks	28/02/24 20/03/24
Term 2	Measurement & Rational Numbers	10 weeks	2.1 – Students use formulas for the areas of triangles and parallelograms and the volumes of rectangular and triangular prisms to solve problems. They describe the relationships between the radius, diameter and circumference of a circle. 2.2 – Students use all 4 operations in calculations involving positive fractions and decimals, choosing efficient calculation strategies. Students choose between equivalent representations of rational numbers and percentages to assist in calculations. They use mathematical modelling to solve practical problems involving rational numbers, percentages and ratios, in financial and other applied contexts, justifying choices of representation.	Exam Exam	- -	10/05/24 12/06/24
Term 3	Statistics & Algebra	10 weeks	3.1 – Students plan and conduct statistical investigations involving discrete and continuous numerical data, using appropriate displays. Students interpret data in terms of the shape of distribution and summary statistics, identifying possible outliers. They decide which measure of central tendency is most suitable and explain their reasoning. 3.2 – Students use algebraic expressions to represent situations, describe the relationships between variables from authentic data and substitute values into formulas to determine unknown values. They solve linear equations with natural number solutions.	Project Exam	Issue date: 24/07/24 Progressive checks -	31/07/24 04/09/24
Term 4	Geometry & Graphs	10 weeks	4.1 – Students apply knowledge of angle relationships and the sum of angles in a triangle to solve problems, giving reasons. Students classify polygons according to their features and create an algorithm designed to sort and classify shapes. They represent objects two-dimensionally in different ways, describing the usefulness of these representations. Students use coordinates to describe transformations of points in the plane. 4.2 – Students create tables of values related to algebraic expressions and formulas, and describe the effect of variation.	Exam Exam	- -	25/10/24 27/11/24