

TERM 2		Week 1 4 days	Week 2 4 days	Week 3 4 days	Week 4 5 days	Week 5 5 days	Week 6 5 days	Week 7 5 days	Week 8 5 days	Week 9 4 days	Week 10 5 days	Week 11 5 days	
Hours per topic	3 hrs.	11 hrs.			9 hrs.			11 hrs.		6.5 hrs.		9 hrs.	
% Coverage		9.8 (34.8%)			4.6 (39.4%)			7.6 (47%)		3 (50%)			
Topic, concepts, skills and values	FORMAL ASSESSMENT TASK INVESTIGATION NB Administer an investigation on any one of the Term 2 topics before teaching it	EXPONENTS Comparing and representing numbers in exponential form - Revise compare and represent whole numbers in exponential form - Compare and represent integers in exponential form - Compare and represent numbers in scientific notation, limited to positive exponents Calculations using numbers in exponential form - Establish general laws of exponents, limited to: $a^m \times a^n = a^{m+n}$ $a^m \div a^n = a^{m-n}$ if $m > n$ $(a^m)^n = a^{m \times n}$ $(a \times t)^n = a^n \times t^n$ $a^0 = 1$ - Recognise and use the appropriate laws of operations using numbers involving exponents and square and cube roots - Perform calculations involving all four operations with numbers that involve squares, cubes, square and cube roots of integers - Calculate the squares, cubes, square and cube roots of rational numbers Solving problems - Solve problems in contexts involving numbers in exponential form			NUMERIC AND GEOMETRIC PATTERNS Investigate and extend patterns - Revise investigate and extend numeric and geometric patterns looking for relationships between numbers, including patterns: - represented in physical or diagram form - not limited to sequences involving a constant difference or ratio - of learner's own creation - represented in tables - Extend investigate and extend numeric and geometric patterns looking for relationships between numbers, including patterns represented algebraically - Describe and justify the general rules for observed relationships between numbers in own words or in algebraic language			FUNCTIONS AND RELATIONSHIPS Input and output values - Revise, determine input values, output values or rules for patterns and relationships using: - flow diagrams - tables - formulae - Extend determine input values, output values or rules for patterns and relationships using equations Equivalent forms - Revise determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: - verbally - in flow diagrams - in tables - by formulae - by number sentences - Extend determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented by equations		ALGEBRAIC EXPRESSIONS Algebraic language - Recognize and identify conventions for writing algebraic expressions Identify and classify like and unlike terms in algebraic expressions - Recognize and identify coefficients and exponents in algebraic expressions Expand and simplify algebraic expression - Use commutative, associative and distributive laws for rational numbers and laws o exponents to: - Add and subtract like terms in algebraic expressions		REVISION AND FORMAL ASSESMENT TASK TEST All Term 1 & 2 topics	
Prerequisite skill/pre-knowledge		- Compare and represent whole numbers in exponential form: $a^b = a \times a \times a \times \dots$ for b number of factors - Recognise and use the appropriate laws of operations with numbers involving exponents and square and cube roots - Perform calculations involving all four operations using numbers in exponential form, limited to exponents up to 5, and square and cube roots - Solve problems in contexts involving numbers in exponential form			- Investigate and extend numeric and geometric patterns looking for relationships between numbers, - Describe and justify the general rules for observed relationships between numbers in own words			- Determine input values, output values or rules for patterns and relationships using flow diagrams, tables and formulae - Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented verbally, in flow diagrams, in tables by formulae and by number sentences		- Recognize and interpret rules or relationships represented in symbolic form - Identify variables and constants in given formulae and/or equations			