ROCKRIDGE SECONDARY SCHOOL

Subject Group Overview: Mathematics

MATHEMATICS — YEAR 3

UNIT	KEY CONCEPT	RELATED CONCEPT(S)	GLOBAL CONTEXT	STATEMENT OF INQUIRY (BC BIG IDEA)	SUMMATIVE(S)	OBJECTIVES	ATLs
Rates, Ratios and Percents	Form	Patterns Space	Scientific and Technical Innovation	Number represents, describes, and compares the quantities of ratios, rates, and percents.	Unit Test	A: i, ii, iii C: iii, iv, v D: i, ii, iii	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Party Planning Project	D: ii, iii	
Operations with Integers and Fractions	Logic	Equivalence Quantity	Fairness & Development	Computational fluency and flexibility extend to operations with fractions.	Unit Test	A: i, ii, iii C: ii, iii, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Multiplying and Dividing Fractions	B: i, ii, iii	
					Fractions Infographic	C: ii, iii, v	
Linear Equations and Relations	Relationships	Change Models	Identities and Relationships	Discrete linear relationships can be represented in many connected ways and used to identify and make generalizations.	Unit Test	A: i, ii, iii C: ii, iii, v D: i, ii, iii	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Describing and Predicting Linear Patterns	B: i, ii, iii	
Geometry: Surface Area and Volume	Form	Models Space	Globalization and Sustainability	The relationship between surface area and volume of 3D objects can be used to describe, measure, and compare spatial relationships.	Unit Test	A: i, ii, iii C: ii, iii, v D: i, ii, iii	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer

MATHEMATICS — YEAR 4

UNIT	KEY CONCEPT	RELATED CONCEPT(S)	GLOBAL CONTEXT	STATEMENT OF INQUIRY (BC BIG IDEA)	SUMMATIVE(S)	OBJECTIVES	ATLs

Polynomials	Logic	Models	Globalization and Sustainability	The principles and processes underlying operations with numbers apply equally to algebraic situations and can be described and analyzed.	Unit Test	A: i, ii, iii C: ii, iii, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Polynomial House Project	C: ii, iii, v D: i, ii, iii, iv, v	
Rational Numbers and Exponents	Form	Generalization Models	Fairness and Development	Computational fluency and flexibility with numbers extend to operations with rational numbers.	Unit Test	A: i, ii, iii C: ii, iii, v	Communication: Interaction Thinking: Creative-Thinking, Transfer
Linear Equations and Relations	Relationships	Change Models	Identities and Relationships	Continuous linear relationships can be identified and represented in many connected ways to identify regularities and make generalizations.	Unit Test	A: i, ii, iii C: ii, iii, v	Communication: Interaction Thinking: Creative-Thinking, Transfer
Scale and Similarity	Form	Models Representation	Scientific and Technical Innovation	Similar shapes have proportional relationships that can be described, measured, and compared.	Unit Test	A: i, ii, iii C: ii, iii, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Apartment Floor Plan	D: i, ii, iii, iv, v	

FOUNDATIONS & PRE-CALCULUS — YEAR 5

UNIT	KEY CONCEPT	RELATED CONCEPT(S)	GLOBAL CONTEXT	STATEMENT OF INQUIRY (BC BIG IDEA)	SUMMATIVE(S)	OBJECTIVES	ATLs
Functions and Relations	Relationships	Models Representation	Personal and Cultural Expression	Algebra allows us to generalize relationships through abstract thinking.	Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Every Graph Tells a Story	D: i, ii, iii, iv, v	
					Frogger Investigation	B: i, ii, iii	

Prime Factors, Exponent Laws and Polynomials	Form	Change Equivalence	Scientific and Technical Innovation	The meaning of, and connections between, each operation extend to powers and polynomials.	Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Exponent Rules	B: i, ii, iii	
Linear Equations and Systems	Relationships	Models Simplification	Scientific and Technical Innovation	Constant rate of change is an essential attribute of linear relations and has meaning in different representations and contexts.	Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Desmos Polygons Investigation	B: i, ii, iii	
Trigonometry	Logic	Models	Scientific and Technical Innovation	Trigonometry involves using proportional reasoning to solve indirect measurement problems.	Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Clinometer Group Project	D: i, ii, iii, iv, v	

WORKPLACE MATHEMATICS — YEAR 5

UNIT	KEY CONCEPT	RELATED CONCEPT(S)	GLOBAL CONTEXT	STATEMENT OF INQUIRY (BC BIG IDEA)	SUMMATIVE(S)	OBJECTIVES	ATLs
Numbers	Logic	Patterns	Indentities and Relationships	Flexibility with number builds meaning, understanding, and confidence.	Business Plan Task	D: i, ii, iii, iv, v	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	
Unit Conversions and Measurement	Form	Models Space	Personal and Cultural Expression	Proportional reasoning is used to make sense of multiplicative relationships.	Discovering the Tangent Ratio	B: i, ii, iii	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	
Geometry	Form	Representation	Orientation in	3D objects can be examined mathematically	Scale Fishing Hut	D: i, ii, iii, iv, v	Communication:

		Space	Space and Time	by measuring directly and indirectly length, surface area, and volume.	Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
Statistics	Relationships	Models Patterns	Identities and Relationships	Representing and analyzing data allows us to notice and wonder about relationships.	Create a Game	B: i, ii, iii	Communication: Interaction Thinking: Critical-Thinking, Creative-Thinking, Transfer
					Graph Analysis	C: i, ii, iii, iv, v	
					Unit Test	A: i, ii, iii C: i, ii, iii, iv, v	