	Unit 1 - Numbers and number systems	Unit 2 - Percentages: Inequality and	Unit 3 - Algebraic expressions and	Unit 4 - Geometric constructions:	Unit 5 - Fractions: Human	Unit 6 - Data management: Trends	Unit 7 - Perimeter, area a
	Civilizations and human interactions.	difference	equations: Patterns in nature.	Artistry and creativity	connections	in communities	volume: Environmental i
Theme/ Topic	Introducing numbers and number	Introducing percentages	Introducing patterns in nature	Introducing geometric constructions	_	Introducing data management	Introducing perimeter, are
	systems	 ■ercentages 	• Bequences	 Bays, line segments and lines 	• Representing and comparing	●Data	volume
	 Representing quantities 	Uses of percentages	• P atterns	 ■arallel segments 	fractions	• Types of data	 Iwo – dimensional shape
	The importance of a number system.	Visual representation of percentages	 Representing patterns with 	●Angles	• Depart on with fractions	 ● Ising graphs to represent data 	diagrams
	 Description that the second sec	● Equivalent forms	expressions	 ■lassifying angles 	Multiplying	• Types of graphs	 Area of 2D shapes
	quantities (Base 10 and Base 60)	Percentages and fractions	 Patterns as functions 	 Angle relationships – Intersecting 	Dividing	Frequency tables	-Area of a triangle
	• Power / Indices	Percentages and decimals	● E quations	lines	Adding and Subtracting	Bar Graphs	 Generalizing relationship
	●Boots	Repeating/ Recurring decimals		 Supplementary angles 	• Multiple operations (BODMAS)		Perimeter and area
	•@lassifying numbers	 Application of percentages 		 Complementary angles 		Circle Graphs (Pie Chart)	-Perimeter and area of a
	Factors	• Percentage change		 Parallel lines and transversal 		 Dsing the different graphs 	rectangle.
	Multiples			• T riangles		-When to use the different graphs	 Perimeter and area of con
	Prime numbers			 ■lassifying triangles 		-Analysing different graphs	shapes
	The sieve of Eratosthenes			 Interior angles of a triangle 		• Making comparisons and showing	 Moving from 2 dimensior
	 Eactors and Divisibility 					trends	dimensions
	Divisibility Rules					 Misleading graphs 	-Defining volume
	 Breatest / Highest Common Factor 					 Interpreting scale 	-Volume of a rectangular p
	Euclid`s method						-🛿urface area – Nets
	Eowest Common Multiple						
	 ●GCF/LCM Application 						
	 Dalculating with numbers 						
	Addition						
	Multiplication						
	Performing many calculations						
	Order of operations (BODMAS)						
Statement of Inquiry	Different systems and forms of	Inequality and difference become	A logical process helps to model	Artistic and creative representation	Using logic to simplify and	Being able to represent	Generalizing the relations
Statement of inquiry	representation develop as civilizations	clearer through the use of equivalent	and generalize patterns in the	of geometric shapes enhance the	manipulate quantities can help us		between measurements ca
	evolve and humans interact.	forms of quantities.	natural world	understanding of various forms of		justify charaterstics and trends	influence decisions that im
				integrated and complex shapes.	within families, communities and		environment
					cultures.		
Key concepts	Form	Form	Logic	Form	Logic	Relationships	Relationships
Related concepts	Representation and System	Equivanlence and Quantity	Generalisation, models and patterns	Representation	Quantity and Simplification	Representation ,Justification and Validity	Generalization and Space
Global Context	Orientation in Space and time	Fairness and development		Personal and cultural expression	Identities and relationships	Identies and relationships	Globalization and sustainal
ATL Skill	Collaboration Skills :	Collaboration Skills:	Reflection skills:	-	Critical thinking Skills:	Media literacy skills:	Creative Thinking Skills:
	Listen actively to other perspectives	Practise empathy	Consider content				Design improvements to ex
	and ideas	Organisation skills:	What did I learn about today?		generalizations.	ideas effectively to multiple	machines, media and techr
	Information literacy skills	Plan short and long-term assignments;			Communication Skills:	audiences using a variety of media	
	Present information in a variety of	meet deadlines.	What questions do I have now?		Give and receive meaningful	and formats.	Consider ethical, cultural a
	formats and platforms		Creative - thinking skills:		feedback.		environmental implication
			Practise visible thinking strategies			Identify trends and forecast	
			and techniques.			possiblities.	

Subject group	Criterion A: Knowing and	Criterion A: Knowing and	Criterion A: Knowing and	Criterion A: Knowing and	Criterion A: Knowing and	Criterion A: Knowing and	Criterion A: Knowing and
Objective	Understanding	Understanding	Understanding	Understanding	Understanding	Understanding	<u>Understanding</u>
	i. select appropriate mathematics when	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics
	solving problems in both familiar and	when solving problems in both familiar	when solving problems in both	when solving problems in both	when solving problems in both	when solving problems in both	when solving problems in both
	unfamiliar situations	and unfamiliar situations	familiar and unfamiliar situations	familiar and unfamiliar situations	familiar and unfamiliar situations	familiar and unfamiliar situations	familiar and unfamiliar situations
	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics
	successfully when solving problems	successfully when solving problems	successfully when solving	successfully when solving problems	successfully when solving	successfully when solving problems	successfully when solving
	iii. solve problems correctly in a variety	iii. solve problems correctly in a variety	problems	iii. solve problems correctly in a	problems	iii. solve problems correctly in a	problems
	of contexts.	of contexts.	iii. solve problems correctly in a	variety of contexts.	iii. solve problems correctly in a	variety of contexts.	iii. solve problems correctly in a
	Criterion C : Communicating	Criterion C : Communicating	variety of contexts.	Criterion C : Communicating	variety of contexts.		variety of contexts.
	i. use appropriate mathematical	i. use appropriate mathematical	Criterion B: Investigating patterns	i. use appropriate mathematical	Criterion C : Communicating	Criterion C : Communicating	
	language (notation, symbols and	language (notation, symbols and	i. apply mathematical problem-	language (notation, symbols and	i. use appropriate mathematical	i. use appropriate mathematical	Criterion C : Communicating
	terminology) in both oral and written	terminology) in both oral and written	solving techniques to recognize	terminology) in both oral and	language (notation, symbols and	language (notation, symbols and	i. use appropriate mathematical
	statements	statements	patterns	written	terminology) in both oral and	terminology) in both oral and	language (notation, symbols and
	ii. use appropriate forms of	ii. use appropriate forms of	ii. describe patterns as	statements	written	written	terminology) in both oral and
	mathematical representation to present	mathematical representation to	relationships or general rules	ii. use appropriate forms of	statements	statements	written
	information	present information	consistent with findings	mathematical representation to	ii. use appropriate forms of	ii. use appropriate forms of	statements
	iii. (not demonstrated at this level)	iii. (not demonstrated at this level)	iii. verify whether the pattern	present information	mathematical representation to	mathematical representation to	ii. use appropriate forms of
	iv. communicate coherent	iv. communicate coherent	works for other examples.	iii. (not demonstrated at this level)	present information	present information	mathematical representation to
	mathematical lines of reasoning	mathematical lines of reasoning	Criterion C : Communicating	iv. communicate coherent	iii. (not demonstrated at this	iii. (not demonstrated at this level)	present information
	v. organize information using a logical	v. organize information using a logical	i. use appropriate mathematical	mathematical lines of reasoning	level)	iv. communicate coherent	iii. (not demonstrated at this level
	structure	structure	language (notation, symbols and	v. organize information using a	iv. communicate coherent	mathematical lines of reasoning	iv. communicate coherent
		Criterion D: Applying mathematics in	terminology) in both oral and	logical structure	mathematical lines of reasoning	v. organize information using a	mathematical lines of reasoning
		real-life context	written		v. organize information using a	logical structure	v. organize information using a
		i. identify relevant elements of	statements		logical structure		logical structure
		authentic real-life situations	ii. use appropriate forms of		Criterion D: Applying		Criterion D: Applying mathematic
		ii. select appropriate mathematical	mathematical representation to		mathematics in real-life context		in real-life context
		strategies when solving authentic real-	present information		i. identify relevant elements of		i. identify relevant elements of
		life situations	iii (not demonstrated at this level)		authentic real-life situations		authentic real-life situations

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Grade 7

Name	Unti 1 : Ratios and proportions	Unit 2: Probability	Unit 3: Integers	Unit 4: Algebraic expressions and equations	Unit 6 :2D and 3D geometry	Unit 6: Rates	Unit 7: Univariate data
Theme/ Topic	Introducing ratio and proportion	Introducing Probability	Introducing integers	Introducing algebraic expressions	Introducing 2D and 3D geometry	Rate	Introducing univariant
	Ratio	Events and outcomes	Integers	and equations -	2D figures	Converting measurements,	Representing data
	Simplifying ratios	Representing the sample space	Absolute value	Algebraic expressions – Describing	Trapezoid	currencies	Stem and leaf plots
	Equivalent ratios	Tree diagrams	The Coordinate grid	expressions	Regular polygons	Unit rates	Back to back stem and leaf
	Representing the ratio	Tables	Plotting coordinate points	Terminology	Area of regular polygons	Problem solving with rates	plots
	Proportions	Representing probability numerically	Operations with integers	Simplifying expressions	Circles	Exploring rate of change.	Analysing data
	Solving proportions	Calculating probability	Multiplication and division	Like terms	Circumference of a circle		Measures of central
	Recognizing and using proportional	Complementary events	Exponents	Writing expressions	Area of a circle		tendency – Mean, median and
	reasoning.	Types of probabilities	Addition and Subtraction	Translating into algebra	3D figures		Mode.
		Experimental Probability	Order of operations (BODMAS)	Equations and inequalities	Surface area of a regular		The effect of outliers
Statement of Inquiry	Using logical process to simplify	A logical system of representation can	Being able to represent different	Producing equivalent forms through	Generalizing relationships	Establishing relationships of	Different forms of representation
	quantities and establish equivalence	help explore and analyse games that	forms of quantities has helped	simplification can help to clarify,	between measurements can help	equivalence between	can help justify conclusions
	can help analyse competition and	humans play.	humans explore and describe our	solve and create puzzles and tricks	explore the formation of human	measurements illustrates the	regarding access to equal
	cooperation.		planet.		and natural landscapes.	interconnectedness of human-	opportunities.
						made systems.	
Key concepts	Logic	Logic	Form	Form	Relationships	Relationships	Form
Related concepts	Equivalence, Quantity and Simplification	Representation, Systems and Justification	Quantity and Representation	Simplification and Equivalence	Generalization, Space	Equivalence,	Representation, justification, Validit
Global Context	Identities and Relationships –	Personal and Cultural Expressions -	Orientation in space and time –	cientific and technical innovation –	Orientation in space and time:	Globalization and sustainability:	Fairness and development:
	Competition and cooperation	Entrepreneurship, practice and	Human explorations	Puzzles and tricks	Human and natural landscape	Interconnectedness of human-	Accessing equal opportunities
		competency				made	
						systems	

ATL Skill	Self-management Skills:	Thinking Skills:	Thinking Skills:	Communication Skills:	Thinking Skills:	Thinking Skills:	Self-management:
	Organization skills:	Critical-thinking skills	Transfer skills	Communication Skills:	Transfer skills:	Creative thinking skills	Reflection skills
	Create plans to prepare for summative	Evaluate and manage risk.	Make connections between subject	Make inferences and draw	Apply skills and knowledge in	Make guesses, asks 'what if'	Consider personal learning
	assessment.	Communication skills:	groups and disciplines.	conclusions.	unfamiliar situations.	questions and generates testable	strategies
	Affective Skills:	Communication skills	Self-management skills:	Thinking Skills:	Communiation Skills:	hypotheses.	What can I do to become a more
	Practise positive thinking	Organize and depict information	Reflection skills	Creative–thinking skills	Communication Skills:	Critical thinking skills	efficient and effective learner?
		logically.	Consider personal learning	Apply existing knowledge to	Make effective summary notes	Draw reasonable conclusions and	How can I become more flexible in
Subject group	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding
Objective	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics
	when solving problems in both familiar	when solving problems in both familiar	when solving problems in both	when solving problems in both	when solving problems in both	when solving problems in both	when solving problems in both
	and unfamiliar situations.	and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.
	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics
	successfully when solving problems iii.	successfully when solving problems iii.	successfully when solving	successfully when solving problems	successfully when solving	successfully when solving problems	successfully when solving
	solve problems correctly in a variety of	solve problems correctly in a variety of	problems iii. solve problems	iii. solve problems correctly in a	problems iii. solve problems	iii. solve problems correctly in a	problems iii. solve problems
	contexts.	contexts.	correctly in a variety of contexts.	variety of contexts.	correctly in a variety of contexts.	variety of contexts.	correctly in a variety of contexts.
	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns
	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical
	problem- solving techniques to discover	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to
	complex patterns	discover complex patterns	discover complex patterns	discover complex patterns	discover complex patterns	discover complex patterns	discover complex patterns
	ii. describe patterns as relationships	ii. describe patterns as relationships	ii. describe patterns as	ii. describe patterns as relationships	ii. describe patterns as	ii. describe patterns as	ii. describe patterns as
	and/or general rules consistent with	and/or general rules consistent with	relationships and/or general rules	and/or general rules consistent with	relationships and/or general rules	relationships and/or general rules	relationships and/or general rules
	findings	findings	consistent with findings	findings	consistent with findings	consistent with findings	consistent with findings
	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships
	and/or general rules.	and/or general rules.	and/or general rules.	and/or general rules.	and/or general rules.	and/or general rules.	and/or general rules.
	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating
	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical
	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and
	terminology) in both oral and written	terminology) in both oral and written	terminology) in both oral and	terminology) in both oral and	terminology) in both oral and	terminology) in both oral and	terminology) in both oral and
	statements	statements	written statements	written statements	written statements	written statements	written statements
	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of
	mathematical representation to present	mathematical representation to	mathematical representation to	mathematical representation to	mathematical representation to	mathematical representation to	mathematical representation to
	information.	present information.	present information.	present information.	present information.	present information.	present information.
	iii. move between different forms of	iii. move between different forms of	iii. move between different forms	iii. move between different forms of	iii. move between different forms	iii. move between different forms	iii. move between different forms
	mathematical representation	mathematical representation	of mathematical representation	mathematical representation	of mathematical representation	of mathematical representation	of mathematical representation
	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent
	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning
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	Thinking Skills:	Thinking Skills:	Communication Skills:	Thinking Skills:	Thinking Skills:	Self-management:
	Critical-thinking skills	Transfer skills	Communication Skills:	Transfer skills:	Creative thinking skills	Reflection skills
mative	Evaluate and manage risk.	Make connections between subject	Make inferences and draw	Apply skills and knowledge in	Make guesses, asks 'what if'	Consider personal learning
	Communication skills:	groups and disciplines.	conclusions.	unfamiliar situations.	questions and generates testable	strategies
	Communication skills	Self-management skills:	Thinking Skills:	Communiation Skills:	hypotheses.	What can I do to become a more
	Organize and depict information	Reflection skills	Creative–thinking skills	Communication Skills:	Critical thinking skills	efficient and effective learner?
	logically.	Consider personal learning	Apply existing knowledge to	Make effective summary notes	Draw reasonable conclusions and	How can I become more flexible in
	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understanding
s	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics	i. select appropriate mathematics
amiliar	when solving problems in both familiar	when solving problems in both	when solving problems in both	when solving problems in both	when solving problems in both	when solving problems in both
	and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.	familiar and unfamiliar situations.
s	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics	ii. apply the selected mathematics
ms iii.	, .	successfully when solving	successfully when solving problems	successfully when solving	successfully when solving problems	successfully when solving
iety of	solve problems correctly in a variety of	problems iii. solve problems	iii. solve problems correctly in a	problems iii. solve problems	iii. solve problems correctly in a	problems iii. solve problems
	contexts.	correctly in a variety of contexts.	variety of contexts.	correctly in a variety of contexts.	variety of contexts.	correctly in a variety of contexts.
	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns	B: Investigating patterns
	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical	i. select and apply mathematical
iscover	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to	problem- solving techniques to
	discover complex patterns	discover complex patterns	discover complex patterns	discover complex patterns	discover complex patterns	discover complex patterns
ips	ii. describe patterns as relationships	ii. describe patterns as	ii. describe patterns as relationships	ii. describe patterns as	ii. describe patterns as	ii. describe patterns as
vith	and/or general rules consistent with	relationships and/or general rules	and/or general rules consistent with	relationships and/or general rules	relationships and/or general rules	relationships and/or general rules
	findings	consistent with findings	findings	consistent with findings	consistent with findings	consistent with findings
	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships	iii. verify and justify relationships
	and/or general rules.	and/or general rules.	and/or general rules.	and/or general rules.	and/or general rules.	and/or general rules.
	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating	Criterion C : Communicating
	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical	i. use appropriate mathematical
	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and	language (notation, symbols and
itten	terminology) in both oral and written	terminology) in both oral and	terminology) in both oral and	terminology) in both oral and	terminology) in both oral and	terminology) in both oral and
	statements	written statements	written statements	written statements	written statements	written statements
	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of	ii. use appropriate forms of
present	mathematical representation to	mathematical representation to	mathematical representation to	mathematical representation to	mathematical representation to	mathematical representation to
	present information.	present information.	present information.	present information.	present information.	present information.
s of	iii. move between different forms of	iii. move between different forms	iii. move between different forms of	iii. move between different forms	iii. move between different forms	iii. move between different forms
	mathematical representation	of mathematical representation	mathematical representation	of mathematical representation	of mathematical representation	of mathematical representation
	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent	iv. communicate coherent
	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning	mathematical lines of reasoning
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		Unit 1 : Number	Unit 2 : Triangles	Unit 3 : Linear relationshi	Unit 4 : 3D shapes	Unit 5: Uni and Bi	Unit 6 : Geometric	Unit 7 : Linear systems
						variate data	Transformations	
Theme,	/ Topic	Rational and irrational numbers	Introducing triangles	Representing linear relationships in	Calculating the surface area and	Representing data using stem-and-	Transforming a figure by rotation,	Solving complex multi-step
		Representing rational numbers	Pythagoras' theorem	different ways	volume of 3-dimensional shapes	leaf plots and box-and-whisker	reflection, translation and dilation	algebraic
		Exponents	Applying the Pythagorean theorem		involving cylinders, cones,	plots		equations
		Zero and negative powers	Similar and congruent triangles	Determining the characteristics of	pyramids and spheres		Analyzing the defining features	Representing and classifying
		Multiplying powers	Proving triangle similarity	a linear relationship (gradient, y		Calculating measures of central	necessary to produce different	systems of linear
		Dividing exponents	Applications of similar triangles	intercept)	Applying mathematical strategies	tendency and measures of	types of tessellations	equations
		Scientific notation	Trigonometric ratios		to solve problems involving 3D	dispersion		Solving a system of linear
		Addition/subtraction with scientific		Graphing linear relationships using	shapes		Applying mathematical strategies	equations using
		notation		a variety of methods	F	Choosing the best method to	to solve problems involving	graphing, substitution and
		Multiplication/division with scientific				represent data	geometric transformations,	elimination
		notation		Understanding the relationship			similarity and congruency	Applying mathematical strategie
				between parallel and		Analysing data and drawing		to solve
<u></u>				nernendicular lines		conclusions	Creating a tessellation	problems using a system of lines
Statem		Representing and simplifying quantities		Representing patterns of change as	-	-	An understanding of patterns	Representing relationships with
		in different forms can help explore		relationships can help determine			created by forms in space can	models can promote and support
			Generalizing relationships between				enhance creativity and help express	social entrepreneurship.
	1	developments.	measurements can help analyze and	making on the environment.	of space.	with other quantities.	beliefs and values.	
			generate products, processes and					
Key cor	ncepts	Form	Relationships	Relationships	Relationships	Relationships	Form	Relationships
		Quantity, representation, simplification		Change, Models, Representation				Representation, Models
			Scientific and technical innovation:	Fairness and development: Social	1		Personal and cultural expression:	Fairness and development: Soci
			Principles, processes, and solutions	entrepreneurship	innovation: Products, processes	innovation: Products, processes	•	entrepreneurship
		·			-	and solutions		

ATL Skill	Decearch, Information literacy skills	Thinking, Critical thinking skills	Change Medels Depresentation	Thisking Creative thisking skills	Information literany skills	Colf management, Deflection skills	Communications Communication
ATL SKIII	Research: Information literacy skills Use memory techniques to develop	Thinking: Critical-thinking skills Test generalizations and conclusions	Change, Models, Representation	Thinking: Creative thinking skills Make guesses, ask "what if"	Process data and report results	e e	Communication: Communication skills
	long-term memory			questions and generate testable		Consider personal learning	38113
	iong term memory	Communication: Communication skills		hypotheses		strategies	Negotiate ideas and knowledge
	Self-management: Affective skills	Give and receive meaningful feedback			Research: Media literacy skills	_	with peers and teachers
	Practice positive thinking				Locate, organize, analyze,	What can I do to become a more	
				Thinking: Transfer skills	evaluate, synthesize and ethically	efficient and effective learner?	
				Combine knowledge,	use information from a variety of		
					sources and media (including	How can I become more flexible in	Social: Collaboration skills
				products or solutions	digital social media and online	my choice of learning strategies?	
					networks)		Help others to succeed
						What factors are important for	
						helping me learn well?	
						Communication: Communication	
						skills	
						Use and interpret a range of	
						discipline-specific terms and	
						symbols	
Subject group	Summative Assessment	Summative Assessment: Designing a	Summative Assessment : Straight	Summative Assessment :	A: Knowing and understanding		A: Knowing and understanding
Objective			Lines Investigation	Choosing the Best Heater			
	Criteria A & C task will be designed	In this assessment students are asked	0	0	select appropriate mathematics	select appropriate mathematics	select appropriate mathematics
	assessing the understanding of several	to find the length of a hypothetical zip	Parallel and perpendicular lines	In this assessment, students are	when solving problems in both	when solving problems in both	when solving problems in both
	concepts learnt in this unit.	line from one building to another in	have algebraic rules within the	,	familiar and unfamiliar situations	familiar and unfamiliar situations	familiar and unfamiliar situations
		the school. In order to do this, they	structures of their equations, both	bedroom with labeled dimensions			
		need to create a clinometer out of a	in the standard form and gradient-	of the room and the furniture.	apply the selected mathematics	apply the selected mathematics	apply the selected mathematics
		protractor, which can be used to	intercept form. This investigation	Students are then tasked with	successfully when solving	successfully when solving problems	
	A: Knowing and understanding	c ,	asks students to model straight	choosing the best possible heater	problems		problems
			lines on the cartesian plane and	for the room based on several		solve problems correctly in a	
	select appropriate mathematics when	measurements can then be used to	then explore the patterns within	conditions, such as cost, fit, and	solve problems correctly in a	variety of contexts.	solve problems correctly in a
	solving problems in both familiar and unfamiliar situations	· · · ·	coefficients of the variables for the two forms of the equations.	space that the heater can heat.	variety of contexts.	B: Investigating patterns	variety of contexts.
		the use of trigonometric ratios. This assessment only works in the specific	two forms of the equations.	The different pieces of furniture	B: Investigating patterns	B. Investigating patterns	B: Investigating patterns
	apply the selected mathematics	place-based context where there are	B: Investigating patterns	of the room are of different	b. investigating patterns	select and apply mathematical	b. investigating patterns
	successfully when solving problems	two buildings (with one being		shapes so students need to know	select and apply mathematical		select and apply mathematical
			select and apply mathematical	now to calculate the areas and	problem- solving techniques to		problem- solving techniques to
	solve problems correctly in a variety of	, , , , , , , , , , , , , , , , , , , ,	problem- solving techniques to	volume for each of them	discover complex patterns		discover complex patterns
	contexts.	proximity to each other. Using a	discover complex patterns			describe patterns as relationships	
		clinometer and measuring			describe patterns as relationships	and/or general rules consistent	describe patterns as relationships
		tape/trundle wheels, students will be	describe patterns as relationships	C: Communicating	and/or general rules consistent	_	and/or general rules consistent
			and/or general rules consistent	C: Communicating	with findings		with findings
	C: Communicating	measurements of the building heights	with findings	use appropriate mathematical		verify and justify relationships	
		and the distance between them.			verify and justify relationships	and/or general rules.	verify and justify relationships
	use appropriate mathematical language	_	verify and justify relationships	terminology) in both oral and	and/or general rules.		and/or general rules.
	(notation, symbols, and terminology) in		and/or general rules.	1	C: Communication	C: Communicating	C. Communication
	both oral and written explanations	time.	C: Communicating	inter explanations	C: Communicating	use appropriate mathematical	C: Communicating
	use appropriate forms of mathematical	C: Communicating		use appropriate forms of	use appropriate mathematical	language (notation symbols and	use appropriate mathematical
		Course Overview , Grade 9 (MY	P 4 Maths) 2023-24	· · · · · · · · · · · · · · · · · · ·			
		- , ,	,				
		In the factor of the second				1	
Unit 1 (6 Weeks)	Unit 2 (3 Weeks) More than likely, loss than cortain	Unit 3 (4 Weeks) Urbanization (IDU	Unit 4 (6 weeks) Shapes - Unit		Unit 6 (7 weeks) History		
Are we related?	More than likely, less than certain	Math and InS)			repeats itself		
					J		

Are we related?		Math and InS)	4		repeats itself		
Unit 1 (6 Weeks)	Unit 2 (3 Weeks)	Unit 3 (4 Weeks) Urbanization (IDU	Unit 4 (6 weeks) Shapes - Unit	Unit 5 (5 weeks) Triangulation	Unit 6 (7 weeks) History		
	SSENYONGA DERRICK , C	Course Overview , Grade 9 (MY	P 4 Maths) 2023-24				
	use appropriate forms of mathematical			use appropriate forms of	use appropriate mathematical	language (notation_symbols_and	use appropriate mathematic
			C: Communicating	-		use appropriate mathematical	
	both oral and written explanations	time.		written explanations	C: Communicating		C: Communicating
	use appropriate mathematical language (notation, symbols, and terminology) in	-	verify and justify relationships and/or general rules.	terminology) in both oral and	and/or general rules.	C: Communicating	and/or general rules.
		and the distance between them.	varify and justify relationships		verify and justify relationships	and/or general rules.	verify and justify relationshi
	C: Communicating	measurements of the building heights	with findings	use appropriate mathematical		verify and justify relationships	
		able to make the needed	and/or general rules consistent	C: Communicating	with findings		with findings
		tape/trundle wheels, students will be	describe patterns as relationships		and/or general rules consistent	with findings	and/or general rules consis
		clinometer and measuring				and/or general rules consistent	describe patterns as relation
		· ·	discover complex patterns			describe patterns as relationships	discover complex patterns
		relatively taller than the other) available and in relatively close	select and apply mathematical problem- solving techniques to	volume for each of them	problem- solving techniques to discover complex patterns	discover complex patterns	problem- solving techniques
		two buildings (with one being		how to calculate the areas and	select and apply mathematical	problem- solving techniques to	select and apply mathemati
	,	place-based context where there are	B: Investigating patterns	shapes so students need to know		select and apply mathematical	
		assessment only works in the specific		The different pieces of furniture of the room are of different	B: Investigating patterns		B: Investigating patterns
		the use of trigonometric ratios. This	two forms of the equations.	space that the heater can heat.		B: Investigating patterns	
		find the height of the building through	coefficients of the variables for the	conditions, such as cost, int, and	variety of contexts.	variety of contexts.	variety of contexts.
		and the top of a building. Those measurements can then be used to	lines on the cartesian plane and then explore the patterns within	for the room based on several	solve problems correctly in a	solve problems correctly in a variety of contexts.	solve problems correctly in
	A: Knowing and understanding	с ,	asks students to model straight	choosing the best possible heater	problems		problems
		protractor, which can be used to	intercept form. This investigation	brudents are then tubked with	successfully when solving	successfully when solving problems	
		need to create a clinometer out of a	in the standard form and gradient-	of the room and the furniture.	apply the selected mathematics	apply the selected mathematics	apply the selected mathema
		-	structures of their equations, both	bedroom with labeled dimensions			
		line from one building to another in	have algebraic rules within the	,, _,, _	familiar and unfamiliar situations	familiar and unfamiliar situations	familiar and unfamiliar situa
	<u> </u>		Parallel and perpendicular lines		when solving problems in both	when solving problems in both	when solving problems in bo
Objective		Zip Line In this assessment students are asked	Lines Investigation	Choosing the Best Heater	select appropriate mathematics	select appropriate mathematics	select appropriate mathema
Subject group	Summative Assessment	Summative Assessment: Designing a	Summative Assessment : Straight	Summative Assessment :	A: Knowing and understanding	A: Knowing and understanding	A: Knowing and understand
						symbols	
						discipline-specific terms and	
						Use and interpret a range of	
						38113	
						Communication: Communication skills	
						helping me learn well?	
						What factors are important for	
				products of solutions	networks)	ing choice of learning strategies:	Help others to succeed
				understanding and skins to create	sources and media (including digital social media and online	my choice of learning strategies?	
				comonie knowledge,	use information from a variety of	How can I become more flexible in	Social: Collaboration skills
				Timining. Transfer skins		efficient and effective learner?	
	Practice positive thinking				Locate, organize, analyze,	What can I do to become a more	
	Self-management: Affective skills	Give and receive meaningful feedback			Research: Media literacy skills		with peers and teachers
		Communication: Communication skills		hypotheses		strategies	Negotiate ideas and knowle
	long-term memory	Test generalizations and conclusions		Make guesses, ask "what if" questions and generate testable	Process data and report results	Consider personal learning	skills
	Use memory techniques to develop						

h		Drohohilituu	Chatiatian	Colombific Notation and the first		Understanding the diff.	I
heme/Topics		Probability:	Statistics:	-		Understanding the difference	
	Reinforcing of linear			figures		between a relation and a function	
		Calculating probabilities of independent			review)		
			Identification of Five Types of sampling	-		Understanding mapping diagrams	
	and range as a	combined events (Simple problems),	techniques- Simple random sampling,	decimal	Solving problems involving triangles		
	concept, in linear		Stratified random sampling,		, .	Knowing how to find ordered	
	relationships.	Solving problems using tree diagrams	Convenience Sampling, Quota	Evaluating numbers with	Pythagoras' theorem and its	pairs in a relation	
	(understanding one-	(with and without replacement) and	Sampling ; Discussion of advantages	integer/fraction and negative	converse problems solving		
	one mapping as	Venn diagrams, two-way tables and	and disadvantages of each type of	exponents		Understanding domain and range	
	linear equalities)	lattice diagrams.	sampling	(Revisiting and more complex	Proving triangles similar and		
				problems with laws of exponents	congruent triangles, real-life	Manipulating functions using the	
	Solving linear		Note: Selecting samples and making		problems,	correct notation	
	inequality and		inferences about populations.	Surds, roots and			
	representing the			approximation(implicitly)	Using scale diagrams to find the	Factorizing quadratic expressions,	
	solution set on the		Response rates of a survey- Definition	radicals, including simplifying)-	area and volume.	where the coefficient of x^2 is 1,	
	number line.		& Interpretation, Applications in real	Word problems using scientific		including the difference of two	
	number me.		life situations. Discussions with the	notation	Relating angles and sides of right-	-	
	laton ol a station			notation		squares	
	Interval notation		help of some surveys, Students can	Detional surplices and solution	angled		
	representing number		create their own surveys and calculate			Factorizing quadratic expressions	
	sets on a number		their survey rates.	rational form and decimal form	triangles using sine, cosine, and	where the coefficient of x^2 is not	
	line.			Example: Represent 0.3333 as	tangent(introduction) in 2-D figures	1	
			Types of data: Representation of data	fraction. Irrational numbers.	and multiple triangles. Bearings.		
	Chosen/open interval		in different forms:			Finding the axis of symmetry and	
	notation &			Symbols/notation for	Trigonometric problem solving,	vertex of a quadratic function	
	inequalities		Pie Chart, Bar Graph, Stem	Rational/irrational numbers, Real	Height, and distance problems.		
			and Leaf (Double stem and leaf),	numbers, natural numbers, whole		Expressing a quadratic function in	
	Solving compound			numbers		three different forms: standard,	
	linear inequalities		Scatter Plot etc.			factorized and vertex	
	and writing their			Using different forms of rounding:			
tatement of Inc		Principles and discoveries often arise	Data handling is the key to		Knowledge of relationships can be	Modelling with the help of	
	and validate	when patterns in the natural world are	understanding the relationships in	and studying their form helps us	used to calculate what cannot be	different forms of representation	
		descibed as relationships.	studies of urbanization and making	enjoy their creativity in space.		can be used to understand the	
	enhances the		predictions and decisions for	- ,- ,- ,- ,- ,- ,- ,- ,- ,- ,- ,- ,- ,-		world around us.	
	development of		sustainable practices to have				
	models		purposeful global interactions.				
ey Concept		Relationships	Global Interactions	Form	Relationships	Form	
	Patterns, Validity	Patterns, Representation	sustainability,		Approximation	Form	
elated Concept	Patterns, validity	Patterns, Representation		Space	1		
			relationships	Representation		Model	
					Patterns		
						Representation	
ilobal Context		Identities and Relationships	Globalisation and sustainability	Personal and Cultural expression	Orientation in Space and Time		
	Technical Innovation						
		Exploration:	Exploration:	Exploration:	Exploration:		
	Exploration:					Scientific and Technical	
		Physical, psychological and social	Urban planning, strategy and	Artistry, Craft, Creation, Beauty	Evoluation, constraints and	Innovation	
		development; transitions; health and	infrastructure.		adaptation		
		well-being; lifestyle choices.				Exploration:	
	their understanding					· · · · · ·	
	of scientific principles					Exploring systems and methods to	
K Strand		Cultures	Governance and Civil Societies	Pluralism		Cultures	
x Stranu					Cultures	Cultures	
	Development	Cive examples of were that without	Po able to analyze people and the	Collaborate with veried service of	Doublen a conce of the quelistic and	Cive examples of wave that	
			Be able to analyse needs and take	Collaborate with varied groups of	Develop a sense of the evolutionary		
		exchange has enhanced civilizations	effective action to raise awareness or	people, working collectively to	nature of culture, the contributions	u u u u u u u u u u u u u u u u u u u	
	connections between		solve a problem in their community	reach a goal or solve a problem.		civilizations	
	economic activity				responsibilities of the present to the		
			1		future.		
	and quality of life.						
ATL Skills		Reflection skills:	Research (Information skills)	Thinking (Creative thinking skills)	Thinking Skills	Communication	

MYP Subject Obj	B(i), (ii), (iii),		IDU:	A(i), (ii), (iii)	A(i), (ii), (iii)
	C(i), (ii), (iii), (iv)	C(i), (ii), (iii), (iv),(v)		C(i), (ii), (iii), (iv),(v)	B(i), (ii), (iii)
	, (v)	D(i), (ii), (iii), (iv), (v)	A - Evaluation	D(i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv), (v)
	A(i), (ii), (iii)				
			B - Synthesizing		
			C - Reflecting		

	D(i) (ii) (iii)			A(i) (ii) (iii)	A(i) (ii) (iii)		
MYP Subject Ob			IDU:	A(i), (ii), (iii)	A(i), (ii), (iii) B(i), (ii), (iii)	A(i), (ii), (iii)	
		C(i), (ii), (iii), (iv), (v)	A - Evaluation	C(i), (ii), (iii), (iv),(v)	B(i), (ii), (iii) C(i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv), (v)	
	, (v) A(i) (ii) (iii)	D(i), (ii), (iii), (iv), (v)	A - Evaluation	D(i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv), (v)	D(i) (ii)(iii)(iv) (v)	
	A(i), (ii), (iii)		B - Synthesizing				
			C - Reflecting				
			C - Kenecting				
		SSENYONGA DERRICK ,	Course Overview , Grade 10 (MYP !	5 Maths) 2023-24			
Units	Functions(6 weeks)	2D to 3D and 2D in 3D	What Comes Next?	Statistics and Probability (3 w	Transformations		
011103	i unctions(o weeks)	(6 WEEKS)	(4 weeks)				
			(4 WEEKS)		(3 weeks)		
					(3 WEEKS)		
Content	"Domain and range.	• Trigonometric Ratio in right angled triangles (Re-cap)	Number Sequences:	Graphical representations (including	· Isometric transformation,		
	Introduction to relation and function.		• Linear, Quadratic, Special sequences	bivariate graphs, scatter	enlargements and tessellations; centre		
		• Application of trigonometry in height and	e.g thangular, hbohacel etc.	graphs, box plots, cumulative	of enlargements, rotation, Movement		
	Determining the range, given the		 Recursive and explicit formulae. Predicting the payt term in a number. 	frequency graphs	on a plane		
	domain of various	on 3D.	Predicting the next term in a number sequence (linear quadratic triangular	Line of Best Fit using Technology only	• Rotation about the given point		
	functions	Circle theorems	sequence (inical, quadratic, triangular,	Data processing: Quartiles and Percentiles	Enrichment: Vector form of		
	(polynomial, root,	Circle theorems	 Developing, and justifying or proving, 		representing translation		
	modulus,	• Similarity and congruency	general rules/ formulae for sequences				
	exponential, rational	• LSA and TSA and Volume of regular		Correlation, qualitative handling			
	and trigonometric)	polyhedral, compound shapes.					
	.Graphing quadratic	Connecting cimilarity and concernency					
	function and	• Connecting similarity and congruency relating to Area and volumes of shapes.					
	understanding its	* Algorithms					
	characteristics.						
	Application of						
	quadratic functions						
	in optimization						
	problems.						
	Revist Solving						
	compound linear						
	Inequality, Graphing						
	Linear Inequalities in 2D."						
Statement of	Relationships can be	Relationships between various forms	Discovering a pattern will help in	Different forms of representation	Generalizing and applying		
Inquiry	modeled to make a	can be used to calculate what we	generalizing a valid relationship to	help to establish underlying	relationships between different		
	generalization and	cannot measure.		relationships and trends to support			
	predictions		· · · ·	descision making.	can help us measure and define		
	predictions				'where', 'when' and 'how'.		
Key Concept	Relationships	Form	Relationships	Relationship	Form		
Related	Generalization and	Justification and Measurement	'	Representation	Justification and Measurement		
Concept	Representation			justification			
Global Context		Orientation in Space and Time		Identities and relationships:	Orientation in Space and Time :		
	technical innovation:			Students will explore identity;	Scale, duration frequecy and		
	Adaptation, ingenuity			beliefs	variability.		
	and progress			and values.			
5				•	•	-	

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AK Strand	Ethics: Understand	Economics for Development	Ethics: Understand the value and	Culture:	Pluralism: Collaborate with varied			
	the value and	• Understand the connections between	significance of living a moral life and	Understand the concepts of	groups of people, walking			
	significance of living	economic activity and quality of life	act	'culture' and 'identity' as a	collectively to reach a goal or solve			
	a moral life and act in		in accordance with their ethical beliefs,	combination of	a problem.			
	accordance with		making informed and making	tangible and intangible factors.				
	their ethical beliefs,		responsible choices.	(students will explore the tangible				
	making and formed			factors				
	and responsible			e.g. Architecture/Art that uses				
	choices.			geometrical figures and				
				tessellations etc				
				representing their identity and				
				culture in its traditions)				
ATL Skills		Thinking: Critical	Critical Thinking: Identify trands and		Solf management (Organization			
ATL SKIIIS	1 Thisking Draw	5	Critical Thinking: Identify trends and	Communication: Understanding	Self-management (Organization			
	1. Thinking: Draw	Practice observing carefully in order to	forecast possibilities.	and use of mathematical notations				
	reasonable	recognize problems. Draw reasonable	Draw reasonable conclusions and	Research (Information literacy	Critical Thinking: Identify multiple			
	conclusions and	conclusions and generalization.	generalization.	skills)	transformations			
	generalizations	Transfer Skills	Transfer Skills					
	2. Communication:	Apply skills and knowledge in unfamiliar	Apply skills and knowledge in					
	Understand and use	situations.	unfamiliar situations.					
	mathematical		Inquire in different context to gain a					
	notation		different perspective.					
MYP Subject	A(i), (ii), (iii)	A (i), (ii), (iii),	B(i), (ii), (iii)	A(i), (ii), (iii),				
Objectives		D (i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv),(v)	B(i), (ii), (iii)			
		C (i), (ii), (iii), (iv), (v)		D(i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv), (v)			
	C(i), (ii), (iii)							
			·		·	·		
		SSENYON	IGA DERRICK , Course Overview	. Grade 10 Ext. (MYP 5 Ext	. Maths) 2023-24			
	Unit 1 -		,	<i>·</i> · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,	Unit 6-Statistics and	Linit 7 Notworking (2	
		Unit 2 -Linear Programming		Unit 4 - Those special			Unit 7 - Networking (2	
	Functions	Problems (3 Weeks)	3D (5 Weeks)	functions (3 Weeks)	(3 weeks)	Probability (3 weeks)	weeks)	
	(6 Weeks)							
Theme/Topics	Determining the	 Modelling the real-life situation using 	Circle Theorems • Trigonometric	• Fractional exponents: Using the	Number Sequences:	Statistics: Data manipulation	Algorithms	
	range, given the	linear inequalities.	Ratios(Revisit)	rules of indices to simplify	• Linear, Quadratic, Special	and misinterpretation(Revisit)	• Network- Edges and arcs, nodes/	
	domain of various	Revisit Solving compound linear	• Bearings Angles; (Revisit) conversion	numerical expressions involving	sequences e.g triangular, Fibonacci	Graphical representations	vertices, paths	
	functions	Inequality, Graphing Linear Inequalities	Radian to Degree to Radian(pi	radicals and exponents	etc.	(including bivariate graphs,	 Calculating network pathways 	
	(polynomial, root,	in 2D.	equivalent to 180 degrees)	 Logarithms, including laws of 	Arithmetic and Geometric		 Weighted network 	
	modulus,							
		 Solving (compound) linear 	• Application of trigonometry in height			Iwhisker plot cumulative		
		 Solving (compound) linear 	 Application of trigonometry in height and distance problem including some 	-	 sequence, Becursive and explicit formulae 	whisker plot, cumulative		
		inequalities.	and distance problem including some	technology to find values ; Solving	• Recursive and explicit formulae.	frequency graphs)(Revisit)		
	and trigonometric).	inequalities.Solving and graphing linear	and distance problem including some problems on 3D,	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a	frequency graphs)(Revisit)Drawing the line of best fit,		
	and trigonometric). • Graphing quadratic	inequalities. Solving and graphing linear inequalities. 	and distance problem including someproblems on 3D,Similarity and congruency	technology to find values ; Solving	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit)		
	and trigonometric).Graphing quadratic function and	inequalities.Solving and graphing linear inequalities.Linear Programming and its	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or 	frequency graphs)(Revisit)Drawing the line of best fit, (Revisit)Standard deviation		
	and trigonometric).Graphing quadratic function and understanding its	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences 	 frequency graphs)(Revisit) Drawing the line of best fit, (Revisit) Standard deviation Making inferences about data given the mean and standard 		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences Enrichment: quadratic, triangular, 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data given the mean and standard deviation, effect of		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions Graphing 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) Area of non-right-angle triangle, 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data given the mean and standard deviation, effect of • Revisiting : Calculating		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions Graphing Trigonometric 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) Area of non-right-angle triangle, Sine cosine rule including 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences Enrichment: quadratic, triangular, 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data given the mean and standard deviation, effect of • Revisiting : Calculating probabilities of combined events,		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions Graphing Trigonometric functions 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing direct and inverse relationships. 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) Area of non-right-angle triangle, Sine cosine rule including applications (link to trigonometric 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences Enrichment: quadratic, triangular, 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data given the mean and standard deviation, effect of • Revisiting : Calculating probabilities of combined events, solving problems using tree		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions Graphing Trigonometric functions Representation and 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing direct and inverse relationships. 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) Area of non-right-angle triangle, Sine cosine rule including applications (link to trigonometric functions) 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences Enrichment: quadratic, triangular, 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data given the mean and standard deviation, effect of • Revisiting : Calculating probabilities of combined events, solving problems using tree diagrams and Venn diagrams,		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions Graphing Trigonometric functions Representation and shape of more 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing direct and inverse relationships. 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) Area of non-right-angle triangle, Sine cosine rule including applications (link to trigonometric functions) LSA and TSA and Volume of regular 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences Enrichment: quadratic, triangular, 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data given the mean and standard deviation, effect of • Revisiting : Calculating probabilities of combined events, solving problems using tree diagrams and Venn diagrams, • Sets, including notation and		
	 and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions Graphing Trigonometric functions Representation and shape of more complex functions 	 inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing direct and inverse relationships. 	 and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) Area of non-right-angle triangle, Sine cosine rule including applications (link to trigonometric functions) LSA and TSA and Volume of regular polyhedral, compound shapes. 	technology to find values ; Solving equations and simultaneous	 Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences Enrichment: quadratic, triangular, 	frequency graphs)(Revisit) • Drawing the line of best fit, (Revisit) • Standard deviation • Making inferences about data given the mean and standard deviation, effect of • Revisiting : Calculating probabilities of combined events, solving problems using tree diagrams and Venn diagrams, • Sets, including notation and operations up to three sets		
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						Ι			
AK Strand	Ethics: Understand	•	Ethics: Understand the value and	Culture:	Pluralism: Collaborate with varied				
	the value and	 Understand the connections between 	significance of living a moral life and	Understand the concepts of	groups of people, walking				
	significance of living	economic activity and quality of life	act	'culture' and 'identity' as a	collectively to reach a goal or solve				
	a moral life and act in		in accordance with their ethical beliefs,	combination of	a problem.				
	accordance with		making informed and making	tangible and intangible factors.					
	their ethical beliefs,		responsible choices.	(students will explore the tangible					
	making and formed			factors					
	and responsible			e.g. Architecture/Art that uses					
	choices.			geometrical figures and					
				tessellations etc					
				representing their identity and					
				culture in its traditions)					
ATL Skills		Thinking: Critical	Critical Thinking: Identify trends and	Communication: Understanding	Self-management (Organization				
	1. Thinking: Draw	0	forecast possibilities.	and use of mathematical notations					
	reasonable	recognize problems. Draw reasonable	Draw reasonable conclusions and	Research (Information literacy	Critical Thinking: Identify multiple				
	conclusions and	conclusions and generalization.	generalization.	skills)	transformations				
	generalizations	Transfer Skills	Transfer Skills						
	2. Communication:		Apply skills and knowledge in						
	Understand and use	situations.	unfamiliar situations.						
	mathematical		Inquire in different context to gain a						
	notation		different perspective.						
MYP Subject	A(i), (ii), (iii)		B(i), (ii), (iii)	A(i), (ii), (iii),					
Objectives		D (i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv),(v)	B(i), (ii), (iii)				
		C (i), (ii), (iii), (iv), (v)		D(i), (ii), (iii), (iv), (v)	C(i), (ii), (iii), (iv), (v)				
	C(i), (ii), (iii)								
	SSENYONGA DERRICK , Course Overview , Grade 10 Ext. (MYP 5 Ext. Maths) 2023-24								
	Unit 1 -	Unit 2 -Linear Programming	Unit 3-2D to 3D and 2D in	Unit 4 -Those special	Unit 5 -What comes next?	Unit 6-Statistics and	Unit 7 - Networking (2		
		8		-					
	Functions	Problems (3 Weeks)	3D (5 Weeks)	functions (3 Weeks)	(3 weeks)	Probability (3 weeks)	weeks)		
							,		
	(6 Weeks)						,		
Theme/Topics	(6 Weeks) • Determining the	Modelling the real-life situation using		• Fractional exponents: Using the	Number Sequences:	Statistics: Data manipulation	Algorithms		
Theme/Topics	()	Modelling the real-life situation using							
Theme/Topics	Determining the	Modelling the real-life situation using	Circle Theorems • Trigonometric	 Fractional exponents: Using the rules of indices to simplify 	Number Sequences:	Statistics: Data manipulation	Algorithms		
Theme/Topics	• Determining the range, given the	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear 	 Circle Theorems Trigonometric Ratios(Revisit) 	 Fractional exponents: Using the rules of indices to simplify 	Number Sequences:Linear, Quadratic, Special	 Statistics: Data manipulation and misinterpretation(Revisit) 	 Algorithms Network- Edges and arcs, nodes/ 		
Theme/Topics	• Determining the range, given the domain of various	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities 	 Circle Theorems Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths 		
Theme/Topics	• Determining the range, given the domain of various functions (polynomial, root,	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
Theme/Topics	• Determining the range, given the domain of various functions (polynomial, root, modulus,	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
Theme/Topics	• Determining the range, given the domain of various functions (polynomial, root, modulus, exponential, rational	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear inequalities. 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height and distance problem including some 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of technology to find values ; Solving 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, Recursive and explicit formulae. 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative frequency graphs)(Revisit) 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
Theme/Topics	• Determining the range, given the domain of various functions (polynomial, root, modulus, exponential, rational and trigonometric).	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear inequalities. Solving and graphing linear 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height and distance problem including some problems on 3D, 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of technology to find values ; Solving equations and simultaneous 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, Recursive and explicit formulae. Predicting the next term in a 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative frequency graphs)(Revisit) Drawing the line of best fit, 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
Theme/Topics	 Determining the range, given the domain of various functions (polynomial, root, modulus, exponential, rational and trigonometric). Graphing quadratic 	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear inequalities. Solving and graphing linear inequalities. 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height and distance problem including some problems on 3D, Similarity and congruency 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of technology to find values ; Solving 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative frequency graphs)(Revisit) Drawing the line of best fit, (Revisit) 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
Theme/Topics	 Determining the range, given the domain of various functions (polynomial, root, modulus, exponential, rational and trigonometric). Graphing quadratic function and 	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear inequalities. Solving and graphing linear inequalities. Linear Programming and its 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of technology to find values ; Solving equations and simultaneous 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative frequency graphs)(Revisit) Drawing the line of best fit, (Revisit) Standard deviation 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
Theme/Topics	 Determining the range, given the domain of various functions (polynomial, root, modulus, exponential, rational and trigonometric). Graphing quadratic function and understanding its 	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of technology to find values ; Solving equations and simultaneous 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative frequency graphs)(Revisit) Drawing the line of best fit, (Revisit) Standard deviation Making inferences about data 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
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Theme/Topics	 Determining the range, given the domain of various functions (polynomial, root, modulus, exponential, rational and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions 	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of technology to find values ; Solving equations and simultaneous 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences Enrichment: quadratic, triangular, 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative frequency graphs)(Revisit) Drawing the line of best fit, (Revisit) Standard deviation Making inferences about data given the mean and standard deviation, effect of 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
Theme/Topics	 Determining the range, given the domain of various functions (polynomial, root, modulus, exponential, rational and trigonometric). Graphing quadratic function and understanding its characteristics. Rational Functions Graphing 	 Modelling the real-life situation using linear inequalities. Revisit Solving compound linear Inequality, Graphing Linear Inequalities in 2D. Solving (compound) linear inequalities. Solving and graphing linear inequalities. Linear Programming and its application in real life. setting up equations and graphing 	 Circle Theorems • Trigonometric Ratios(Revisit) Bearings Angles; (Revisit) conversion Radian to Degree to Radian(pi equivalent to 180 degrees) Application of trigonometry in height and distance problem including some problems on 3D, Similarity and congruency Pythagoras Theorem & its converse Justifying and proving using theorems of similarity and congruency(just as a reference) Area of non-right-angle triangle, 	 Fractional exponents: Using the rules of indices to simplify numerical expressions involving radicals and exponents Logarithms, including laws of logarithms and the use of technology to find values ; Solving equations and simultaneous 	 Number Sequences: Linear, Quadratic, Special sequences e.g triangular, Fibonacci etc. Arithmetic and Geometric sequence, Recursive and explicit formulae. Predicting the next term in a number sequence (linear,) Developing, and justifying or proving, general rules/ formulae for sequences 	 Statistics: Data manipulation and misinterpretation(Revisit) Graphical representations (including bivariate graphs, scatter graphs, revisiting box and whisker plot, cumulative frequency graphs)(Revisit) Drawing the line of best fit, (Revisit) Standard deviation Making inferences about data given the mean and standard deviation, effect of Revisiting : Calculating 	 Algorithms Network- Edges and arcs, nodes/ vertices, paths Calculating network pathways 		
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				Equivalence of different forms of	Discovering a pattern will help in	Different forms of representation help to establish underlying	Appropriate representation will	
Inquiry	modeled to make a	understand equality and inequality	can be used to calculate what we	representations leads to better	generalizing a relationship to	relationships and trends to support	help in applying a logic to make a	
	generalization and		cannot measure.	understanding of underlying	predict change	descision making.	wise decisions. Critical Thinking:	
	predictions			situations.		-	Consider ideas from multiple	
Key Concept	Relationships	Relationships	Form	Form	Relationships	Representation	perspectives Logic	
		Model & Representation	Justification, Approximation	Representations, equivalence	Generalization, change, pattern	Representation, Justification	Representation	
	Representation	Wodel & Representation	sustineation, Approximation	hepresentations, equivalence	Generalization, change, pattern	hepresentation, sustineation	Representation	
Global Context	· ·	Scientific and technical innovation:	Orientation in Space and Time	Scientific and technical innovation	Scientific and technical innovation:	Identities and	Scientific and technical innovation;	
		Adaptation, ingenuity, and progress			Adaptation, ingenuity and progress		Students will explore the natural	
	Adaptation, ingenuity						world and its laws;	
	and progress					values;	,	
		Ethics: Understand the value and	Cultures: Understand how cultural	Governance and civil societies	Economics for Development•		Pluralism : Collaborate with varied	
	the value and	significance of living a moral life and act	groups interact with, influence and		Understand the connections	significance of living a moral life	groups of people, working	
	significance of living	in accordance with their ethical beliefs,	impact each other in different times		between economic activity and	and act in accordance with their	collectively to reach a goal or solve	
	-	making and formed and responsible	and places and the effects of these		quality of life.	ethical beliefs, making informed	a problem.	
		choices.	interactions.			and responsible choices.		
	their ethical beliefs,							
	making and formed							
	and responsible							
	choices							
ATL Skills	Creative: Consider	Creative: Consider multiple	Thinking: Critical	Thinking: Critical	Critical Thinking:	Communication: Understanding	Critical Thinking:	
		alternatives, including those that might	Practice observing carefully in order to	-	Identify trends and forecast	and use mathematical notations	Consider ideas from multiple	
		be unlikely or impossible,	recognize problems. Draw reasonable	• •	-	Research (Information literacy	perspectives	
	might be unlikely or	 Thinking: Draw reasonable 	conclusions and generalization.	reasonable conclusions and		skills)		
		conclusions and generalizations	Transfer Skills	generalization				
		• Communication: Understand and use	Apply skills and knowledge in					
	-	mathematical notation	unfamiliar situations.					
	conclusions and		Inquire in different contexts to gain a					
	generalizations		different perspective.					
	Communication:							
	Understand and use							
	mathematical							
	notation							
Subject Group	Criterion A: Knowing	Criterion A: Knowing and	Criterion A: Knowing and	Criterion A: Knowing and	Criterion B: Investigating Patternsi.	Criterion A: Knowing and	Criterion A: Knowing and	
Objective(s)	and Understandingi.	Understandingi. select appropriate	Understandingi. select appropriate	Understandingi. select appropriate	select and apply mathematical	Understandingi. select	Understandingi. select appropriate	
	select appropriate	mathematics when solving problems in	mathematics when solving problems in	mathematics when solving	problem-solving techniques to	appropriate mathematics when	mathematics when solving	
	mathematics when	both familiar and unfamiliar situations	both familiar and unfamiliar situations	problems in both familiar and	discover complex patterns	solving problems in both familiar	problems in both familiar and	
	solving problems in	ii. apply the selected mathematics	ii. apply the selected mathematics	unfamiliar situations	ii. describe patterns as general rules	and unfamiliar situations	unfamiliar situations	
	both familiar and	successfully when solving problems	successfully when solving problems	ii. apply the selected mathematics	consistent with findings	ii. apply the selected mathematics	ii. apply the selected mathematics	
	unfamiliar situations	iii. solve problems correctly in a variety	iii. solve problems correctly in a variety	successfully when solving	iii. prove, or verify and justify,	successfully when solving	successfully when solving problems	
	ii. apply the selected	of contexts.	of contexts.	problems	general rules.	problems	iii. solve problems correctly in a	
	mathematics	Criterion C: Communicatingi. use	Criterion C: Communicatingi. use	iii. solve problems correctly in a	Criterion C: Communicatingi. use	iii. solve problems correctly in a	variety of contexts.	
	successfully when	appropriate mathematical language	appropriate mathematical language	variety of contexts.	appropriate mathematical language	-	Criterion C: Communicatingi. use	
	solving problems	(notation, symbols and terminology) in	(notation, symbols and terminology) in		(notation, symbols and	-	appropriate mathematical language	
	iii. solve problems	both oral and written explanations	both oral and written explanations	select and apply mathematical	terminology) in both oral and	appropriate mathematical	(notation, symbols and	
	correctly in a variety	ii. use appropriate forms of	ii. use appropriate forms of	problem-solving techniques to	written explanations		terminology) in both oral and	
	of contexts.	mathematical representation to present	mathematical representation to	discover complex patterns	ii. use appropriate forms of	terminology) in both oral and	written explanations	
			present information	ii. describe patterns as general	mathematical representation to	written explanations	ii. use appropriate forms of	
		iii. move between different forms of	iii. move between different forms of	rules consistent with findings	present information	ii. use appropriate forms of	mathematical representation to	
		mathematical representation	mathematical representation	iii. prove, or verify and justify,	iii. move between different forms of		present information	
		iv. communicate complete, coherent	iv. communicate complete, coherent	general rules.	mathematical representation		iii. move between different forms	
		and concise mathematical lines of	and concise mathematical lines of		iv. communicate complete,		of mathematical representation	
		reasoning	reasoning		coherent and concise mathematical		iv. communicate complete,	
		v. organize information using a logical	v. organize information using a logical		lines of reasoning		coherent and concise mathematical	
					v. organize information using a	coherent and concise	lines of reasoning	
		structure.	structure.					
		structure. Criterion D: Applying Mathematics in	structure. Criterion D: Applying Mathematics in		logical structure.	mathematical lines of reasoning	v. organize information using a	
					logical structure.	mathematical lines of reasoning v. organize information using a	 v. organize information using a logical structure. 	
		Criterion D: Applying Mathematics in	Criterion D: Applying Mathematics in		logical structure.	, i i i i i i i i i i i i i i i i i i i	• •	
		Criterion D: Applying Mathematics in Real-Life Contextsi. identify relevant	Criterion D: Applying Mathematics in Real-Life Contextsi. identify relevant		logical structure.	v. organize information using a	• •	
		Criterion D: Applying Mathematics in Real-Life Contextsi. identify relevant elements of authentic real-life	Criterion D: Applying Mathematics in Real-Life Contextsi. identify relevant elements of authentic real-life		logical structure.	v. organize information using a logical structure.	• •	
		Criterion D: Applying Mathematics in Real-Life Contextsi. identify relevant elements of authentic real-life situations	Criterion D: Applying Mathematics in Real-Life Contextsi. identify relevant elements of authentic real-life situations ii. select appropriate mathematical		logical structure.	v. organize information using a logical structure. Criterion D: Applying	• •	