

Mathematics Subject Overview MYP Years I-V

MYP-I

Seri	Unit	Кеу	Related	Global	Statement Of	MYP Objectives	Approaches To	Content	Assessment
al	Name	Concept	Concepts	Context	Inquiry		Learning		
No.									
NO. 1	Number and number systems	Form	Mathematics •representatio n •systems	Orientation in space and time focus exploration(s) • civilizations and human interactions	Different systems and forms of representation develop as civilizations evolve and humans interact.	Mathematics year 1 objectives objective a: knowing and understanding i. Select appropriate mathematics when solving problems in both familiar and unfamiliar situations. Ii- apply the selected mathematics successfully when solving problems lii- solve problems correctly in a variety of contexts. Objective c: communicating i. Use appropriate mathematical language (notation, symbols and terminology) in oral and written statements. Ii- use appropriate forms of mathematical representation to present information. Iii- communicate coherent mathematical lines of reasoning. Iv- organize information using a logical structure.	Collaboration skills •listen actively to other perspectives and ideas Information literacy skills •present information in a variety of formats and platforms	Representing numbers and place value, expanded form Number systems with different bases. Powers, indices, and roots. Factors, multiples, and prime numbers. Greatest common factor and lowest common multiple. Factors and divisibility. Number systems from different civilizations	Summative: Research on binary number system. Criterion C Communicating

2	Dorcont	Form	Mathomatics	Eairpose and	Inoquality and	Mathematics	Collaboration	i:difforont	Summativa
2	agos	FUTIII		dovelopment	difforence	voor 1 objectives	conaboration	forms of	Community modulation
	ages		• equivalence	development	hoomo dooror	year 1 objectives	SKIIIS		for the ionitorial staff
			•quantity	focus	through the use	understanding	•practise	2: convorting	for the janitorial stan
				iocus	through the use	i Calast annuariata	empathy	2. converting	
				exploration(s)	or equivalent	I. Select appropriate	organization		Criterier A
				• inequality,		mathematics when solving	SKIIIS	percentages	Criterion A
				difference and	quantities.	problems in both familiar	•plan short- and	3: converting	Knowing and
				Inclusion		and unfamiliar situations	long-term	decimals and	
						II- apply the selected	assignments;	percentages	Criterion C
						mathematics successfully	meet deadlines	4: applications	
						when solving problems		of percentages	
						III- solve problems		5: percentage	Applying mathematics
						correctly in a variety of		increase and	in real life contexts.
						contexts.		decrease	
						Objective c:			
						communicating			
						i. Use appropriate			
						mathematical language			
						(notation, symbols and			
						terminology) in both oral			
						and written statements			
						ii- use appropriate forms			
						of mathematical			
						representation to present			
						information.			
						lii- organize information			
						using a logical structure			
						Objective d: applying			
						mathematics in real-life			
						contexts			
						 -i. Identify relevant 			
						elements of authentic real-			
						life situations			
						-ii. Select appropriate			
						mathematical strategies			
						when solving authentic			
						real-life situations			

3	Informa	 relations 	Mathematics	Identities and	Being able to	Mathematics	Media literacy	Types of data	Summative [.]
5	tion	hins	lustification	relationshins	renresent	year 1 objectives	skills	representation	Organize a hake sale
	handlin	mps	•representatio	relationships	relationshins	objective a: knowing and	•communicate	of data	For the charity nurnose
	σ		n	focus	effectively can	understanding	information and	types of	Represent the
	ъ			exploration(s)	heln justify	-i Select appropriate	ideas effectively	granhs	quantities sold of
				• trend in	characteristics	mathematics when solving	to multiple	comparison of	different baked goods
				communities	and trends	nrohlems in both familiar	audiences using	data and	showcasing the
				communities	uncovered in	and unfamiliar situations	a variety of	showing	nonularity of items by
					communities	ii- apply the selected	media and	trends	using any kind of graph
					communicies.	mathematics successfully	formate	micloading	using any kinu of graph.
						when solving problems	critical-thinking	graphs	
						iii Solvo problems	chille	graphs	
						correctly in a variety of	•identify trends		
						contexts	and forecast		
						Objective c:	nossibilities		
						communicating	information		Criterion C
						-i Use appropriate	literacy skills		Communicating
						mathematical language	•collect_record		Criterion D
						(notation symbols and	and verify data		Applying mathematics
						terminology) in both oral	reflection skills		in real life contexts
						and written statements	•develop new		in real me contexts.
						-ii Use appropriate forms	skills techniques		
						of mathematical	and strategies		
						representation to present	for effective		
						information	learning		
						-iii Communicate			
						coherent mathematical			
						lines of reasoning			
						-iv. Organize information			
						using a logical structure.			
						Objective d: applying			
						mathematics in real-life			
						contexts			
						-i. Identify relevant			
						elements of authentic real-			
						life situations			
						-ii. Select appropriate			
						mathematical strategies			
						when solving authentic			
						real-life situations			
						-iii. Apply the selected			
						mathematical strategies			
						successfully to reach a			
						solution			

			 -iv. Explain the degree of accuracy of a solution -v. Describe whether a solution makes sense in the context of the authentic real-life situation. 		

4	Algebra		Mathematics	Scientific and		Mathematics	Communication	Patterns in	Summative
7	Aigebra	·logic	•models	technical	helps to model	vear 1 objectives	chille	different	Summative.
	statomo		enattorns	innovation	and generalize	objective a: knowing and	euso appropriato	forms	Create a report on
	nte		•generalizatio	mnovation	notterns in the	understanding	forms of writing	diagrams	famous sequence that
	1113		•generalizatio	focus	patterns in the	i Soloct appropriato	for different	ulagranis,	occurs all around us
				evoloration(s)		mathematics when solving	nurnoses and	tables and	Research where you
				• pattorns in		nrobloms in both familiar	audioneos	words simplif	find this sequence and
						and unfamiliar situations	reflection skills	worus simpli ving algebraic	other special
				nature		-ii Apply the selected		expressions	relationshins that are
						mathematics successfully	content	generalizing	hased on the nattern of
						when solving problems	creative	mathematical	this sequence
							thinking skills	natterns	this sequence.
						correctly in a variety of	•nractise visible	natterns as	
						contexts	thinking	functions	
						Objective h: investigating	strategies and	algebraic	
						natterns	techniques	equations	Criterion B
						-i Apply mathematical	teeninques	natterns in	Investigating Patterns
						nrohlem-solving		nature	Criterion C
						techniques to recognize		nature	Communicating
						natterns			Criterion D
						-ii. Describe patterns as			Applying mathematics
						relationships or general			in real life contexts.
						rules consistent with			
						findings			
						-iii. Verify whether the			
						pattern works for other			
						examples.			
						Objective c:			
						communicating			
						-i. Use appropriate			
						mathematical language			
						(notation, symbols and			
						terminology) in both oral			
						and written statements			
						-ii. Use appropriate forms			
						of mathematical			
						representation to present			
						information			
						-iii. Communicate			
						coherent mathematical			
						lines of reasoning			
						-iv. Organize information			
						using a logical structure.			
						Objective d: applying			

			mathematics in real-life		
			contexts		
			-i. Identify relevant		
			elements of authentic real-		
			life situations		
			-ii. Select appropriate		
			mathematical strategies		
			when solving authentic		
			real-life situations		
			 -iii. Apply the selected 		
			mathematical strategies		
			successfully to reach a		
			solution		
			-iv. Explain the degree of		
			accuracy of a solution		
			 -v. Describe whether a 		
			solution makes sense in		
			the context of the		
			authentic real-life		
			situation.		

5	Geomet	•form	Mathematics	Personal and	Artistry and	Mathematics	Information	Ravs. line	Summative:
_	ric	-	 approximatio 	cultural	creativity are	year 1 objectives	literacy skills	segments and	
	represe		n	expression	enhanced	objective a: knowing and	•use memory	lines	Create vour own work
	ntation		•space		through an	understanding	techniques to	classifving.	of art(painting.
	s			focus	understanding of	-i. Select appropriate	develop long-	measuring and	drawing, sculpture.
	-			exploration(s)	how space and	mathematics when solving	term memory	constructing	mosaic or any other
				• artistry.	approximation	problems in both familiar	transfer skills	angles	piece of art) that
				craft. creation.	help to define	and unfamiliar situations	•make	angles formed	includes the elements
				beauty	forms.	-iii. Solve problems	connections	by intersecting	that you have seen
				· · · · · ,		correctly in a variety of	between subject	lines and	throughout the unit
						contexts.	groups and	parallel lines	(ravs. lines. line
						Objective b: investigating	disciplines	with a	segment, angles.
						patterns		transversal	triangles).
						-i. Apply mathematical		classification	
						problem-solving		of triangles	
						techniques to recognize		interior and	Criterion C
						patterns		exterior angles	Communicating
						-ii. Describe patterns as		of triangles	U U
						relationships or general		0	
						rules consistent with			
						findings			
						-iii. Verify whether the			
						pattern works for other			
						examples.			
						Objective c:			
						communicating			
						-i. Use appropriate			
						mathematical language			
						(notation, symbols and			
						terminology) in both oral			
						and written statements			
						-ii. Use appropriate forms			
						of mathematical			
						representation to present			
						information			
						-iii. Communicate			
						coherent mathematical			
						lines of reasoning			
						objective d: applying			
						mathematics in real-life			
						contexts			
						-ii. Select appropriate			
						mathematical strategies			
						when solving authentic			

			real-life situations		
			-iii. Apply the selected		
			mathematical strategies		
			successfully to reach a		
			solution		
			-iv. Explain the degree of		
			accuracy of a solution		
			 -v. Describe whether a 		
			solution makes sense in		
			the context of the		
			authentic real-life		
			situation.		

6	Bounda		Mathematics	Globalization	Generalizing the	Mathematics	Reflection skills	Venn diagrams	Summative
0	rv	erelations	•generalizatio	and	relationshin	vear 1 objectives	•consider	nerimeter and	Summative.
	mossur	hing	n	sustainability	hetween	objective a: knowing and	ethical cultural	area of	Determine the best
	AS	mps	•measuremen	Sustainability	measurements	understanding	and	triangles	nossible shane of a
	63		+	focus	con influence	i Soloct appropriato	anu anvironmontal	roctangles,	coroal box in order to
			L	evoloration(s)	decisions that	mathematics when solving	implications	compound	minimize nackaging
					impact the	nrobloms in both familiar	creative	compound	minimize packaging.
				environmental	environment	and unfamiliar situations	thinking skills	2d shapes and	Criterion C
				impacts	environment.	ii. Apply the selected		the volume of	Communicating
				impacts		mathematics successfully	•uesign	corresponding	Critorion D
						when solving problems	ovisting	nrisms	Applying mathematics
							machinas modia	volume of	in roal life contexts
						correctly in a variety of	and tochnologies	roctangular	in real me contexts.
						contexts	and technologies	and triangular	
						Objective b: investigating		nrisms	
						natterns		surface area of	
						-i Apply mathematical		rectangular	
						nrohlem-solving		and triangular	
						techniques to recognize		nrisms	
						natterns		relationshins	
						-ii Describe natterns as		hetween	
						relationships or general		surface area	
						rules consistent with		and volume of	
						findings		nrisms	
						-iii Verify whether the		prisiris	
						nattern works for other			
						examples			
						Objective c:			
						communicating			
						-i. Use appropriate			
						mathematical language			
						(notation, symbols and			
						terminology) in both oral			
						and written statements			
						-ii. Use appropriate forms			
						of mathematical			
						representation to present			
						information			
						-iii. Communicate			
						coherent mathematical			
						lines of reasoning			
						-iv. Organize information			
						using a logical structure.			
						Objective d: applying			

			mathematics in real-life		
			contexts		
			-i. Identify relevant		
			elements of authentic real-		
			life situations		
			 -ii. Select appropriate 		
			mathematical strategies		
			when solving authentic		
			real-life situations		
			-iii. Apply the selected		
			mathematical strategies		
			successfully to reach a		
			solution		
			-iv. Explain the degree of		
			accuracy of a solution		
			 -v. Describe whether a 		
			solution makes sense in		
			the context of the		
			authentic real-life		
			situation.		

MYP-II

Seri	Unit	Кеу	Related	Global Context	Statement Of	MYP Objectives	Approaches To	Content	Assessment
al	Name	Concept	Concepts		Inquiry		Learning		
No.									
1	Ratio and	 Logic 	Mathematics	Identities and	Using a	Mathematics	Transfer skills	Simplifying ratios	Summative:
	Proportio		 Quantity 	relationships	logical	Year 1 Objectives	 Apply skills and 	Equivalent ratios	
	n		 Simplificatio 		process to	Objective A:	knowledge in	Other ways to	Solve the problems based
			n	Focus	simplify	Knowing and	unfamiliar situations	represent ratios	on the concepts.
			 Equivalence 	exploration(s)	quantities	understanding	Affective skills	Solving	
				 Competition 	and establish	-i. Select	 Practise positive 	proportions	Criterion C
				and	equivalence	appropriate	thinking	Proportional	Communicating
				cooperation	can help	mathematics when	Organization skills	reasoning	Criterion D
					analyze	solving problems in	 Create plans to 		Applying mathematics in
					competition	both familiar and	prepare for		real life contexts.
					and	unfamiliar situations	summative		
					cooperation.	-ii. Apply the	assessments		
						selected	(examinations and		
						mathematics	performances)		
						successfully when			
						solving problems			
						-iii. Solve problems			
						correctly in a variety			
						of contexts.			
						Objective B:			
						Investigating			
						patterns			
						-i. Apply			
						mathematical			
						problem-solving			
						techniques to			
						recognize patterns			
						-ii. Describe			
						patterns as			
						relationships or			
						general rules			
						consistent with			
						findings			
						-iii. Verify whether			
						the pattern works			
						for other examples.			
						Objective C:			
						Communicating			

			-i. Use appropriate		
			mathematical		
			language (notation,		
			symbols and		
			terminology) in oral		
			and written		
			statements		
			-ii. Use appropriate		
			forms of		
			mathematical		
			representation to		
			present information		
			-iii. Communicate		
			coherent		
			mathematical lines		
			of reasoning		
			-iv. Organize		
			information using a		
			logical structure		
			Objective D:		
			Annlying		
			mathematics in		
			real-life contexts		
			-i Identify relevant		
			elements of		
			authentic real-life		
			situations		
			-ii Select		
			annronriate		
			mathematical		
			strategies when		
			solving authentic		
			real-life situations		
			solected		
			mathematical		
			stratogios		
			successfully to		
			reach a solution		
			degree of accuracy		
			of a solution		
			-v. Describe		
			whether a solution		

			makes sense in the context of the authentic real-life		
			situation.		

2	Drobobilit	alogia	Mathematics	Dersonal and	Alagical	Mathematics	Critical thinking	Events and	Summative
2	Probabilit	·LOgic	Mathematics	cultural	A logical	Voor 1 Objectives	chucal-uninking		Summative.
	У		• Dennesenteti	cultural	system of	Chiestine A	SKIIIS	Decreases	Design a game that
			Representati	expression	representatio	Objective A:		Representing the	Design a game that
			011	F	n can neip	Knowing and	managerisk	Sample space	demonstrates the
			•Systems	FOCUS	explore and	understanding		Defining and	principles of probability,
				exploration(s)	analyze	-I. Select		representing	snowcasing its logical
				• Game and	games that	appropriate		probability	concepts and principles.
				play	humans play.	mathematics when		Calculating	
						solving problems in		probability	
						both familiar and		Complementary	Criterion A:
						unfamiliar situations		events	Knowing and
						-ii. Apply the		Types of	understanding
						selected		probability	Criterion B:
						mathematics		Theoretical	Investigating patterns
						successfully when		versus	
						solving problems		experimental	Criterion C
						-iii. Solve problems		probability	Communicating
						correctly in a variety			Criterion D
						of contexts.			Applying mathematics in
						Objective B:			real life contexts.
						Investigating			
						patterns			
						-ii. Describe			
						patterns as			
						relationships or			
						general rules			
						consistent with			
						findings			
						Objective C:			
						Communicating			
						-i. Use appropriate			
						mathematical			
						language (notation,			
						symbols and			
						terminology) in oral			
						and written			
						statements			
						-ii. Use appropriate			
						forms of			
						mathematical			
						representation to			
						present information			
						-iv. Organize			
						information using a			

Objective D: Applying mathematics in real-life contexts -i. Identify relevant elements of authentic real-life situations -ii. Select appropriate mathematical strategies when solving authentic real-life situations -v. Describe whether a solution makes sense in the context of the authentic real-life situations	
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3	Mono-	●Form	Mathematics	Fairness and	Different	Mathematics	Collaboration skills	Stem-and-leaf	Summative:
	variate		•	development	forms of	Year 1 Objectives	 Practise empathy 	plots	Organize a bake sale
	data		Representati		representatio	Objective A:	Critical-thinking		For the charity purpose
			on	Focus	n can help	Knowing and	skills	Measures of	 Calculate the
			 Quantity 	exploration(s)	justify	understanding	 Interpret data 	central tendency	average amount
				 Accessing 	conclusions	-i. Select	Information literacy	(mean, median,	of items sold.
				equal	regarding	appropriate	skills	mode)	 identifies the
				opportunities	access to	mathematics when	 Process data and 		most frequently
					equal	solving problems in	report results	The effect of	sold item.
					opportunities	both familiar and		outliers	
						unfamiliar situations			
						-ii. Apply the		Measures of	
						selected		dispersion	
						mathematics		(range and	
						successfully when		quartiles)	
						solving problems			
						-iii. Solve problems		Box and whisker	Criterion C
						correctly in a variety		plots	Communicating
						of contexts.			Criterion D
						Objective B:			Applying mathematics in
						Investigating			real life contexts.
						patterns			
						-iii. Verify whether			
						the pattern works			
						for other examples.			
						Objective C:			
						Communicating			
						-i. Use appropriate			
						mathematical			
						language (notation,			
						symbols and			
						terminology) in both			
						oral and written			
						statements			
						-ii. Use appropriate			
						forms of			
						mathematical			
						representation to			
						present information			
						-iii. Communicate			
						coherent			
						mathematical lines			
						of reasoning			
						-iv. Organize			

						logical structure. Objective D: Applying mathematics in real-life contexts -i. Identify relevant elements of authentic real-life situations -iii. Apply the selected mathematical strategies successfully to reach a solution -v. Describe whether a solution makes sense in the context of the authentic real-life situation.			
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4	Positive	●Form	Mathematics	Orientation in	Being able to	Wathematics	I ransfer skills	what is an	Summative:
	ana 		• Representat	space and time	represent	rear 1 Objectives	•iviake connections	integer?	Follow the
	negative		ion	_	different	Objective B:	between subject	Absolute value	voyage of a famous
	numbers		 Quantity 	Focus	forms of	Investigating	groups and	The coordinate	explorer and then plot
				exploration(s)	quantities	patterns	disciplines	grid	out your own voyage of
				• Human	has helped	-i. Apply	Reflection skills	Multiplication	discovery (create a map
				explorations	humans	mathematical	 Consider personal 	and division	of each trip)
					explore and	problem-solving	learning strategies	Addition and	
					describe our	techniques to		subtraction	Criterion D
					planet.	recognize patterns		Multiple	Applying mathematics in
						-ii. Describe		operations	real life contexts.
						patterns as			
						relationships or			
						general rules			
						consistent with			
						findings			
						-iii. Verify whether			
						the pattern works			
						for other examples.			
						Objective D:			
						Applying			
						mathematics in			
						real-life contexts			
						-i. Identify relevant			
						elements of			
						authentic real-life			
						situations			
						-ii. Select			
						appropriate			
						mathematical			
						strategies when			
						solving authentic			
						real-life situations			
						-iii. Apply the			
						selected			
						mathematical			
						strategies			
						successfully to			
						reach a solution			
						-iv. Explain the			
						degree of accuracy			
						of a solution			
						-v. Describe			
						whether a solution			

			makes sense in the context of the		
			authentic real-life		
			situation.		

 J ciquature from mathematics scientinic and equivalent of simplificatio inserved in simplificatio inserved in simplificatio inserved in through inserved inserved	г	Equations	•Form	Mathamatica	Scientific and	Droducing	Mathamatica	Creative thinking	Classifuing	Summativa
indu *equivatinte real rougeures innovation simultation real rougeures innovation simultation	5	Equations	•Form	Mathematics	Scientific and	Producing	Veer 1 Objectives		Classifying	Summative:
b cyression b cyression c cyression r cyr		anu Everessie		•Equivalence	innovation	forms	Chiesting A.	skills	algebraic	Analyse a mathematical
In Solution of the second state of the seco		Expressio		•Simplificatio	IIIIOvation	through	Ubjective A.	•Apply existing	expressions	Analyse a mathematical
 Puzzles and tricks Puzzles and trick		115			Focus	cimplification	understanding	sonorate new ideas	Simplifying	
 - Jecci and characteric data intervention of tricks - Vertices and tricks - Vertices and tricks - Secci and create puzzles and tricks - Secci and tricks					Focus	simplification	i Soloct	products or	ovprossions	one of your own.
intervent application application protesses communication Writing communication intricks and create puzzles and tricks. both familiar and skills expressions Criterion C Objective B: intricks. both familiar and unfamiliar situations and draw Solving communicating Objective B: investigating patterns					• Duzzlos and		-I. Select	products of	expressions	Critorian R
underletate inductionation withing interesting patterns puzzies and tricks. unfamiliar situations unfamiliar situations Make inferences and draw Solving equations Objective B: Investigating patterns					• Puzzies and	ciarity, solve	appropriate	Communication	M/riting	Criterion B:
buzzie and tricks. buzzie and tricks. buzzie and tricks. buzzie and unfamiliar situations Objective 8: newestigating patterns -i. Apply mathematical problem-solving techniques to recognize patterns -ii. Describe general rules origeneral rules patterns as relationships or general rules onsistent with findings -iii. Verify whether the pattern works for other examples. Objective 1: -ii. Verify whether the pattern works for other examples. Objective -ii. Use appropriate mathematical language (notation, symbols and terminology) in both original and written statements -ii. Use appropriate mathematical language (notation, symbols and terminology) in both original and written statements -ii. Use appropriate mathematical language (notation, symbols and terminology) in both original and written -i. Use appropriate mathematical language (notation, -i. Use appropriate mathematical language (notation, -symbols and terminology) in both original and written -statements					UTICKS	and create	induire inducs when	communication	whiting	
Image: constraint and constraints and constrain						puzzies and	solving problems in	SKIIIS	expressions	Communication
Objective S: conclusions equations investigating patterns Writing patterns equations i. Apply equations mathematical Application of problem-solving equations techniques to Representing recognize patterns inequalities -ii. Describe Solving patterns as inequalities relationships or general rules consistent with findings findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate and written and written statements and unvirten statements						UTICKS.	Dotti i amiliar and		Solving	Communicating
Objective 5: Collections equations investigating patterns Writing equations -i. Apply equations mathematical Application of problem-solving equations techniques to Representing recognize patterns inequalities -ii. Describe Solving general rules consistent with consistent with findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements								anu uraw	Solving	
Image: Partnerms Writing -i. Apply equations mathematical Application of problem-solving equations techniques to Representing recognize patterns inequalities -ii. Describe Solving patterns as inequalities relationships or general rules consistent with findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements							Ubjective B:	conclusions	equations	
 i. Apply equations mathematical Application of equations equations techniques to Representing recognize patterns inequalities solving patterns as relationships or general rules consistent with findings iii. Verify whether the pattern works for other examples. Objective C: Communicating i. Use appropriate mathematical language (notation, symbols and terminology in both oral and written statements 							nottorns		M/riting	
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recting the patterns inequalities -ii. Describe patterns as inequalities relationships or general rules consistent with findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							tochniquos to		Poproconting	
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patterns as inequalities inequa									Solving	
relationships or general rules consistent with findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							-II. Describe		inoqualitios	
general rules consistent with findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							patterns as		inequalities	
consistent with findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements							relationships of			
 Consistent with findings -iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate 							general rules			
-iii. Verify whether the pattern works for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							findings			
Image: Second							-iii Verify whether			
for other examples. Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							the nattern works			
Objective C: Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							for other examples			
Communicating -i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							Objective C.			
-i. Use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements -ii. Use appropriate							Communicating			
mathematical language (notation, symbols and terminology) in both oral and written statements							-i. Use appropriate			
language (notation, symbols and terminology) in both oral and written statements							mathematical			
symbols and terminology) in both oral and written statements							language (notation			
terminology) in both oral and written statements							symbols and			
oral and written statements							terminology) in both			
statements							oral and written			
-ii. Use appropriate							statements			
							-ii. Use appropriate			
forms of							forms of			
mathematical							mathematical			
representation to							representation to			
present information							present information			
-iii. Communicate							-iii. Communicate			
coherent							coherent			

			mathematical lines		
			of reasoning		
			-IV. Organize		
			information using a		
			logical structure.		

6	Eco-	 Develop 	Design	Globalization	Statement of	Design	Critical-thinking	Design	Summative:
	friendly	ment	 Perspective 	and	Inquiry:	Year 1 Objectives	skills	Know	
	Packaging		 Evaluation 	sustainability	Sustainable	Objective A:	 Analyse complex 		 Design Eco-
					products can	Inquiring and	concepts and	* Fundamental	friendly food
	(Interdisci		Mathematics	Focus	be developed	analysing	projects into their	safety	packaging
	plinary		 Space 	exploration(s)	through an	-iii. Describe the	constituent parts	expectations for	considering
	unit)			 Consumption, 	understandin	main features of an	and synthesize	working with	diverse
				conservation,	g of different	existing product	them to create new	cardboard/paper	perspectives and
				scarcity	perspectives.	that inspires a	understanding	fabrication tools	sustainable
						solution to the	Transfer skills	and materials	materials,
					Conceptual	problem	•Combine	* Basic	utilizing
					Understandin	Objective B:	knowledge,	perspectives	Geometric
					g:	Developing ideas	understanding and	influencing	Calculations.
					Throughout	-ii. Present feasible	skills to create	packaging	Create a
					this unit,	design ideas, which	products or	design, including	reflective
					students will	can be correctly	solutions	Graphic Design,	process journal
					develop an	interpreted by		User	exploring the
					appreciation	others		considerations,	creative process
					for the	Objective C:		and Recycling	behind designing
					sustainable	Creating the		principles	eco-friendly
					design of	solution		* The Elements	packaging in
					products,	-iii. Follow the plan		and Principles of	your e-portfolio.
					ensuring they	to create the		Graphic Design	
					meet the	solution, which			Interdisciplinary criteria
					diverse	functions as		Understand	based
					needs of	intended			
					users. This	Objective D:		* The	Criterion A:
					will be	Evaluating		positive/negativ	Evaluating
					achieved	-iii. Outline how the		e impact of	Criterion B:
					through an	solution could be		choices related	Synthesizing
					inquiry into	improved		to tool safety on	Criterion C:
					various	-iv. Outline the		their peers	Reflecting
					perspectives	impact of the		* The	
					that	solution on the		collaborative	
					significantly	client/target		contribution of	
					contribute to	audience.		each perspective	
					product			to the overall	
					development.	Mathematics		product design	
					In this	Year 1 Objectives		process	
					context, the	Objective C:		* How the	
					application	Communicating		Elements and	
					and	-i. Use appropriate		Principles of	
					assessment	mathematical		Graphic Design	
					of	language (notation,		synergize to	

pri gui sus use	rinciples will uide the	terminology) in both oral and written	communicate	
gui sus	uide the	oral and written	information in	
sus	istainable		information in	
use	istaniabic	statements	existing products	
	se of	-ii. Use appropriate	01	
ma	aterials,	forms of	Be Able To	
pai	articularly in	mathematical		
the	ie ,	representation to	* Safely and	
pro	rototyping	present information	responsibly	
an	nd	-iv. Organize	develop product	
pro	oduction	information using a	packaging using	
ph	hases.	logical structure.	appropriate	
, Personal Person		Objective D:	tools and	
Ad	dditionally.	Applying	materials	
stu	udents will	mathematics in	* Navigate the	
ext	plore the	real-life contexts	balance between	
nat	ature and	-i. Identify relevant	the needs and	
SUS	istainability	elements of	preferences of	
of	product	authentic real-life	diverse	
	ackaging.	situations	perspectives	
cor	onsidering	-ii. Select	while	
	erspectives	appropriate	conceptualizing	
fro	om	mathematical	product ideas	
dif	fferent	strategies when	and/or final	
de	sign	solving authentic	nroducts	
sta	akeholders	real-life situations	* Skillfully	
Suc	ich as	-iii. Apply the	combine the	
pa	ackaging	selected	Elements and	
de	esigners	mathematical	Principles of	
	sers	strategies	Granhic Design	
rec	ecyclers	successfully to	to effectively	
ma	arketers	reach a solution	convey	
an	nd retailers	-v. Describe	information	
		whether a solution	about their own	
inc	corporation	makes sense in the	nroducts	
of	geometric	context of the	* Make design	
	loulations	authentic real-life	decisions	
an	nd	situation	grounded in a	
rea	asoning will	Situation.	sustainable	
for	orm the		understanding of	
for	undation of		efficient	
the			materials usage	
de	ecision-		annlying	
ma	aking		mathematical	
and rea for fou the dee	na easoning will orm the oundation of eeir ecision-	situation.	grounded in a sustainable understanding of efficient materials usage, applying	

related to sustainability and materials usage in packaging design. i. analyse disciplinary i. evaluate interdisciplinary i. evaluate interdisciplinary i. evaluate interdisciplinary i. evaluate interdisciplinary perspectives. Synthesizing i. create a product i. create a product interdisciplinary understanding i. justify how their product communicates interdisciplinary understanding. i. justify how their product communicates interdisciplinary understanding. i. justify how their product communicates interdisciplinary understanding. i. justify how their product communicates interdisciplinary understanding. Objective C: calculate the a existing shape development of * How to apply development of * How to apply
Industry Interview based criteria based Mathematics usage in Objective A: Content packaging Evaluating Know design. i.analyse Know disciplinary * The basic knowledge formulas for i.evaluate calculating the interdisciplinary surface area of a perspectives. rectangle (and Objective B: square), triangle, Synthesizing and cricle i.create a product * The basic that communicates formulas for a purposeful calculating the interdisciplinary volume of a understanding cuboid, prism, i.justify how their and cylinder product communicates formulas to objective C: calculate the Kitteriabased interdisciplinary * How to apply understanding. formulas to objective C: calculate the Reflecting an existing shape development of * How to apply </td
Substantion Substantion Mathematics and materials Usage in packaging design. Objective A: Evaluating Content i. analyse Know Statistical and materials Know disciplinary * The basic Know ii. evaluate calculating the interdisciplinary surface area of a perspectives. rectangle (and Objective B: square, triangle, Synthesizing and circle i. create a product * The basic i. tat communicates formulas for a purposeful calculating the interdisciplinary volume of a undoetsanding cuboid, prism, ii. j. create a product * The basic formulas for a purposeful calculating the interdisciplinary volume of a understanding cuboid, prism, ii. justify how their and cylinder product communicates Understanding. formulas to Objective B: Goldite the Reflecting surface area of i. discuss the an existing shape development of * How to apply
And internation Objective A: Content usage in packaging design. i. analyse Know i.ainalyse * The basic Knowledge formulas for ii.evaluate calculating the iinternation operation ii.evaluate calculating the surface area of a perspectives. rectangle (and operation Objective B: square), triangle, square), triangle, Synthesizing and circle i. create a product * The basic i. create a product * The basic that communicates formulas for i.interdisciplinary volume of a understanding cuboid, prism, i.justify how their and cylinder product product volume of a understanding. comunicates Understand volume of a understanding. there area of interdisciplinary volume of a understanding. comunicates Understand volume of a understanding. comunicates Understand volume of a understanding. formulas to Objective C: volume o
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disciplinary * The basic knowledge formulas for ii. evaluate calculating the interdisciplinary surface area of a perspectives. rectangle (and Objective B: square), triangle, Synthesizing and circle i. create a product * The basic that communicates formulas for a purposeful calculating the interdisciplinary volume of a understanding cuboid, prism, ii. justify how their product communicates Understand interdisciplinary * How to apply understanding. formulas to Objective C: calculating shape i. discuss the an existing shape development of * How to apply
knowledge formulas for ii. evaluate calculating the interdisciplinary surface area of a perspectives. rectangle (and Objective B: square), triangle, Synthesizing and circle i. create a product * The basic that communicates formulas for a purposeful calculating the interdisciplinary volume of a understanding cuboid, prism, ii. justify how their and cylinder product communicates Understanding. Understand objective C: calculate the Reflecting surface area of i. discuss the an existing shape development of * How to apply
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i. discuss the an existing shape development of * How to apply their own formulas to
development of * How to apply
development of THOW to apply
thour own
interdisciplinary calculate the
learning volume of an
ii. discuss how new existing form
interdisciplinary * How to
understanding develop a net for
enables action. an existing 3-
dimensional
shape.
Be Able To
* Select the
correct methods
for analyzing the
design derisions
of others based

				on mathematical	
				reasoning	
				* Be able to	
				justify their use	
				of materials by	
				, calculating the	
				surface area and	
				3-dimensional	
				volume of their	
				product	
				* Develop a net	
				of a 3-	
				dimensional	
				shape/constructi	
				on	

MYP-III

Seri	Unit	Кеу	Related	Global	Statement Of	MYP Objectives	Approaches	Content	Assessment
al	Name	Concept	Concepts	Context	Inquiry		To Learning		
No.									
1	Numbers	 Form 	Mathematic	Orientation in	Representing	Mathematics	Affective skills	Introducing	Summative:
			s	space and	and simplifying	Year 3 Objectives	 Practise 	the	
			 Quantity 	time	quantities in	Objective A: Knowing and	positive	number	Solve the problems based
			 Simplificati 		different forms	understanding	thinking	Rational	on the concepts.
			on	Focus	can help explore	-i. Select appropriate	Information	and	
			 Representa 	exploration(s)	remarkable	mathematics when solving	literacy skills	irrational	Criterion C
			tion	 Discoveries 	discoveries and	problems in both familiar and	•Use memory	numbers	Communicating
				and	developments.	unfamiliar situations	techniques to	Exponents	Criterion D
				Development		-ii. Apply the selected	develop long-	Scientific	Applying mathematics in
						mathematics successfully	term memory	notation	real life contexts.
						when solving problems			
						-iii. Solve problems correctly			
						in a variety of contexts.			
						Objective B: Investigating			
						patterns			
						-i. Select and apply			
						mathematical problem-solving			
						techniques to discover			
						complex patterns			
						-ii. Describe patterns as			
						relationships and/or general			
						rules consistent with findings			
						-iii. Verify and justify			
						relationships and/or general			
						rules.			
						Objective C: Communicating			
						-i. Use appropriate			
						mathematical language			
						(notation, symbols and			
						terminology) in both oral and			
						written explanations			
						-ii. Use appropriate forms of			
						mathematical representation			
						to present information			
						-iii. Move between different			
						forms of mathematical			

			representation		
			-iv. Communicate complete		
			and coherent mathematical		
			lines of reasoning		
			-v. Organize information using		
			a logical structure.		
			Objective D: Applying		
			mathematics in real-life		
			contexts		
			-i. Identify relevant elements		
			of authentic real-life		
			situations		
			-ii. Select appropriate		
			mathematical strategies when		
			solving authentic real-life		
			situations		
			-iii. Apply the selected		
			mathematical strategies		
			successfully to reach a		
			solution		
			-iv. Explain the degree of		
			accuracy of a solution		
			 -v. Explain whether a solution 		
			makes sense in the context of		
			the authentic real-life		
			situation.		

2	Triangles	•Relation	Mathematic	Scientific and	Generalizing the	Mathematics	Critical	Introducing	Summative:
2	inangies	shine	s	technical	relationshin	Vear 3 Objectives	thinking skills	triangle	Construct a mathematical
		311123	5	innovation	between	Objective A: Knowing and	•Tost	Theorems	model that visually
			Generalizati	milovation	measurements	understanding	generalization	and proof	represents Pythagoras'
			on	Focus	can bein develon	-i Select appropriate	s and	Relationshi	theorem
			•Systems	evoloration(s)	nrinciples	mathematics when solving	conclusions	ns hetween	theorem.
			Systems	Principles	principles,	nrohlems in both familiar and	Communicatio	triangles	
				o Frincipies,	solutions	unfamiliar situations	n skills	Dythagoras	
				solutions	3010110113.	-ii Apply the selected	•Give and	Theorem	
				3010110113		mathematics successfully	receive	meorem	Criterion A:
						when solving problems	meaningful		Knowing and
						Objective B: Investigating	feedback		understanding
						natterns	TEEUDACK		Criterion B:
						-ii Describe natterns as			Investigating natterns
						relationships and/or general			investigating patterns
						rules consistent with findings			Criterion C
						-iii. Verify and justify			Communicating
						relationships and/or general			Criterion D
						rules.			Applying mathematics in
						Objective C: Communicating			real life contexts.
						-i. Use appropriate			
						mathematical language			
						(notation, symbols and			
						terminology) in both oral and			
						written explanations			
						-ii. Use appropriate forms of			
						mathematical representation			
						to present information			
						-v. Organize information using			
						a logical structure.			
						Objective D: Applying			
						mathematics in real-life			
						contexts			
						-i. Identify relevant elements			
						of authentic real-life			
						situations			
						-ii. Select appropriate			
						mathematical strategies when			
						solving authentic real-life			
						situations			
						-v. Explain whether a solution			
						makes sense in the context of			
						the authentic real-life			
						situation.			

3	Data	 Relation 	Mathematic	Identities and	Modeling the	Mathematics	Organization		Summative:
-	with two	ships	S	relationships	relationship	Year 3 Objectives	skills	Introducing	Organize a bake sale
	attribute		•Models	·	between	Objective C: Communicating	 Select and 	bivariate	For the charity purpose
	s		 Quantity 	Focus	quantities can	-i. Use appropriate	use	data	• Draw a scatter
				exploration(s)	highlight what it	mathematical language	technology	Representi	plot that display
				 What it 	means to be	(notation, symbols and	effectively and	ng	the relationship
				mean to be	human.	terminology) in both oral and	productively	bivariate	between the price
				human		written explanations	Media literacy	data	of baked goods
						-ii. Use appropriate forms of	skills	Analyzing	and the quantity
						mathematical representation	 Locate, 	bivariate	sold.
						to present information	organize,	data	
						-iii. Move between different	analyse,	Correlation	
						forms of mathematical	evaluate,	and	
						representation	synthesize and	causation	Criterion C
						-iv. Communicate complete	ethically use		Communicating
						and coherent mathematical	information		Criterion D
						lines of reasoning	from a variety		Applying mathematics in
						-v. Organize information using	of sources and		real-life contexts.
						a logical structure.	media		
							(including		
							digital social		
							media and		
							online		
							networks)		

•	N	.1		Clabalization				* Final and	Commenting
4	Network	•Logic	Mathematic	Globalization	Global networks	Mathematics	Media literacy	* Find out	Summative
	working		S	and	are built on logic	Year 3 Objectives	SKIIIS	now logic	Design a quiz that will
	principle		•Change	sustainability	and are changing	Objective A: Knowing and	•Locate,	can	help someone decide
	S		• Models	_	the way we	understanding	organize,	influence	their Learner Profile.
				Focus	handle data,	-I. Select appropriate	analyse,	or change	The "Which Learner
				exploration(s)	make decisions	mathematics when solving	evaluate,	our	Profile are you?"
				• impact of	and design	problems in both familiar and	synthesize and	decision-	The quiz should use a
				human	models.	unfamiliar situations	ethically use	making.	decision tree or an
				decision		-ii. Apply the selected	information	* Explore	algorithm with paths that
				making		mathematics successfully	from a variety	the	end at each of the learner
						when solving problems	of sources and	connection	profile characteristics,
						-iii. Solve problems correctly	media	between	determined by questions
						in a variety of contexts.	(including	invisible	with yes or no answer
						Objective B: Investigating	digital social	algorithms	only.
						patterns	media and	and our	
						-I. Select and apply	online	everyday	
						mathematical problem-solving	networks)	lives.	
						techniques to discover	Critical-	* Take	
						complex patterns	thinking skills	action by	
						-ii. Describe patterns as	•Identify	appreciatin	Criterion C
						relationships and/or general	obstacles and	g, and	Communicating
						rules consistent with findings	challenges	improving,	Criterion D
						-iii. Verify and justify		our library	Applying mathematics in
						relationships and/or general		and media-	real life contexts.
						rules.		center	
						Objective C: Communicating		spaces.	
						-i. Use appropriate		* (
						mathematical language		* How	
						(notation, symbols and		old are the	
						terminology) in both oral and		games?	
						written explanations		* How	
						-ii. Use appropriate forms of		can games	
						mathematical representation		be based	
						to present information		on logic?	
						-iii. Move between different		* What	
						forms of mathematical		about	
						representation		other types	
						-iv. Communicate complete		of riddles?	
						and coherent mathematical		* Can	
						lines of reasoning		puzzles be	
						-v. Organize information using		modeled?	
						a logical structure.		* How	
						Objective D: Applying		does logic	
						mathematics in real-life		lead to	

			contexts	graph	
			-i. Identify relevant elements	theory?	
			of authentic real-life	* How	
			situations	can	
			-ii Select appropriate	notworks	
			mathematical strategies when	globally	
			solving outbontic roal life	giobally	
			solving authentic real-life		
			-III. Apply the selected	* what	
			mathematical strategies	are	
			successfully to reach a	decision	
			solution	trees and	
			-iv. Explain the degree of	how do	
			accuracy of a solution	they work?	
			 -v. Explain whether a solution 	* How	
			makes sense in the context of	can	
			the authentic real-life	algorithms	
			situation.	change	
				things for	
				us?	
				* What	
				do we	
				mean by an	
				invisible	
				algorithm?)	

5	Linear	 Relation 	Mathematic	Fairness and	Representing	Mathematics	Communicatio	Introducing	Summative:
	Models	ships	s	development	relationships	Year 3 Objectives	n skills	linear	Run your own business for
		•	 Representa 		with models can	Objective A: Knowing and	 Negotiate 	systems	a day.
			tion	Focus	promote and	understanding	ideas and	Solving	-
			 Models 	exploration(s)	support social	-i. Select appropriate	knowledge	linear	
				 social 	entrepreneurshi	mathematics when solving	with peers and	equations	Criterion C
				entrepreneurs	р.	problems in both familiar and	teachers	Solving	Communicating
						unfamiliar situations	Collaboration	systems of	Objective D:
						-iii. Solve problems correctly	skills	linear	Applying mathematics in
						in a variety of contexts.	 Help others 	equations	real-life contexts
						Objective B: Investigating	to succeed	Problem-	
						patterns		solving	
						 -i. Select and apply 		with linear	
						mathematical problem-solving		systems	
						techniques to discover			
						complex patterns			
						-iii. Verify and justify			
						relationships and/or general			
						rules.			
						Objective C: Communicating			
						-ii. Use appropriate forms of			
						mathematical representation			
						to present information			
						-iii. Move between different			
						forms of mathematical			
						representation			
						Objective D: Applying			
						Contexts			
						-II. Select appropriate			
						colving outboatic real life			
						solving authentic real-life			
						situations			

6	Geometr	•Form	Mathematic	Personal and	An	Mathematics	Reflection	Introducing	Summative:
	ic		s	cultural	understanding of	Year 3 Objectives	skills	geometric	Create a tessellation for
	Conversi		 Patterns 	expression	patterns created	Objective A: Knowing and	 Consider 	transforma	yourself that reflect you as
	on		•Space		by forms in	understanding	personal	tions	a person.
				Focus	space can	-i. Select appropriate	learning	tessellation	-
				exploration(s)	enhance	mathematics when solving	strategies	S	
				 Expressing 	creativity and	problems in both familiar and	Communicatio	Congruenc	
				beliefs and	help express	unfamiliar situations	n skills	e	Criterion C
				values	beliefs and	-ii. Apply the selected	 Use a variety 	transforma	Communicating
					values.	mathematics successfully	of media to	tions	_
						when solving problems	communicate	Similarity	
						Objective B: Investigating	with a range of	transforma	
						patterns	audiences	tions	
						-i. Select and apply	 Interpret and 		
						mathematical problem-solving	use effectively		
						techniques to discover	modes of non-		
						complex patterns	verbal		
						-ii. Describe patterns as	communicatio		
						relationships and/or general	n		
						rules consistent with findings			
						-iii. Verify and justify			
						relationships and/or general			
						rules.			
						Objective C: Communicating			
						-ii. Use appropriate forms of			
						mathematical representation			
						to present information			
						-iii. Move between different			
						forms of mathematical			
						representation			
						-iv. Communicate complete			
						and coherent mathematical			
						lines of reasoning			
						 -v. Organize information using 			
						a logical structure.			
						Objective D: Applying			
						mathematics in real-life			
						contexts			
						-i. Identify relevant elements			
						of authentic real-life			
						situations			
						-ii. Select appropriate			
						mathematical strategies when			
						solving authentic real-life			

			situations -iii. Apply the selected mathematical strategies successfully to reach a solution -v. Explain whether a solution makes sense in the context of the authentic real-life situation		

MYP-IV

Seri	Unit	Кеу	Related	Global Context	Statement Of	MYP Objectives	Approaches To	Content	Assessment
al	Name	Concept	Concepts		Inquiry		Learning and		
No.							Learners Profile		
1	Exploring	Form	Patterns	Globalization	Numbers in	Year 3 Objectives	Communicatio	Review:	Summative:
	Number			and	different	Objective A:	n skills:	- To classify the natural numbers,	
	Diversity			sustainability	forms give us a	Knowing and	 Use and 	Integers, rational, real numbers,	Can rounding
					variety of ways	understanding	interpret a	rational, irrational numbers.	help or hinder
					to predict	-i. Select	range of	- Convert fractions to decimals	decision
				Exploration:	patterns and	appropriate	discipline-	- Round decimals to significant	making?
				Markets,	think about	mathematics when	specific terms	figures Represent the standard	Research and
				commodities,	problems of	solving problems in	and symbols	form of huge numbers	explain with
				and	global	both familiar and	 Understand 	- Identify the radicals or surds -	reasoning
				commercializati	significance.	unfamiliar situations	and use	Solve the numerical surds.	
				on		-ii. Apply the	mathematical	 Expand and simplify brackets 	
						selected	notations.	involving numerical surds Find the	Criterion D:
						mathematics	Thinking –	fractional	Applying
						successfully when	Creative	exponents SET	mathematics
						solving problems	thinking skills:	- Identify the element of a set	in real-life
						-iii. Solve problems	 Generating 	- Sets – Rule method	contexts
						correctly in a variety	novel ideas	 Sets – Representing 3 sets using 	Criterion B:
						of contexts.	and	a Venn diagram.	Investigating
						Objective B:	considering	 Investigate the properties of 	Patterns.
						Investigating	new	sets.	
						patterns	perspectives;	 Sets, including notation and 	
						-i. Select and apply	Use	operations up to three sets	
						mathematical	brainstorming		
						problem-solving	and visual		
						techniques to	diagrams to		
						discover complex	generate new		
						patterns -ii. Describe	ideas and		
						patterns as	inquiries.		
						relationships and/or			
						general rules	_		
						consistent with	Learner Profile		
						findings -iii. Verify	Communicator		
						and justify			
						relationships and/or			
						general rules.			

						Objective C:			
						Communicating			
						-i. Use appropriate			
						mathematical			
						language (notation,			
						symbols and			
						terminology) in both			
						oral and written			
						explanations			
						Objective D:			
						Applying			
						mathematics in			
						real-life contexts			
						-i. Identify relevant			
						elements of			
						authentic real-life			
						situations			
						-ii. Select			
						appropriate			
						mathematical			
						strategies when			
						solving authentic			
						real-life situations			
						-iii. Apply the			
						selected			
						mathematical			
						strategies			
						successfully to reach			
						a solution			
						-iv. Explain the			
						degree of accuracy			
						of a solution			
						-v. Explain whether			
						a solution makes			
						sense in the context			
						of the authentic			
						real-life situation			
2	Exploring	Relation	Simplific	Identities and	Finding and	Year 3 Objectives	Communicati	Review:	Summative:
	Algebra	ships.	ation	relationships	expressing	Objective A:	on skills:	- Identify the laws of indices.	
					things in	Knowing and	Use and	- Solve problems based on Direct	Expand and
					common helps	understanding	interpret a	and inverse proportions.	simplify
				Exploration:	us to simplify	-i. Select	range of Self-	Algebra:	different
				Moral	and improve	appropriate	management	- Algebraic rules - Linear equations	Questions
				reasoning and	relationships	mathematics when	discipline-	- Expanding expressions	

[othical		colving problems in	concific torms	Rinomial expansions	Critorion P.
		iudama	ant	both familiar and	and symbols	- Binomial expansions	Investigating
		Judgine			and symbols	- Ferrect square, identifies.	nivestigating
					6 - If	- Factorizing quadratic	patterns
				-II. Apply the	Self-	expressions	Criterion C:
				selected	manageme	- Solving quadratic equations	Communicati
				mathematics	nt	- Changing the subject of an	ng.
				successfully when	– Affective	equation	
				solving problems	skills:		
				-iii. Solve problems	Practise	Linear equation on graph	
				correctly in a variety	analyzing	Gradients Quadrants Extrapolate,	
				of contexts.	and	interpolate graphs Algebra in real-	
				Objective B:	attributin	life Simultaneous equations	
				Investigating	g causes	Complex equations Simultaneous	
				patterns	for	equations on graphs	
				-i. Select and apply	failure.		
				mathematical			
				problem-solving	Use		
				techniques to	appropriate		
				discover complex	strategies for		
				patterns	organizing		
				-ii. Describe	complex		
				patterns as	information.		
				relationships and/or			
				general rules			
				consistent with	Learner Profile		
				findings -iii. Verify	Thinker		
				and justify			
				relationships and/or			
				general rules			
				Objective C:			
				Communicating			
				-i Use annronriate			
				mathematical			
				language (notation			
				symbols and			
				terminology) in both			
				oral and written			
				explanations -ii Lice			
				annronriate forms			
				of mathematical			
				representation to			
				nepresentation to			
				different forms of			
1				unterent forms of			1

						mathematical representation -iv. Communicate complete and coherent mathematical lines of reasoning -v. Organize information using a logical structure			
3	Trigonom etric Mastery	Relation ships	Models	Scientific and technical innovation Exploration: Modernization, industrialization and engineering	Modeling allows us to solve new spatial relationship problems arising from technical innovation.	Year 3 Objectives Objective A: Knowing and understanding -i. Select appropriate mathematics when solving problems in both familiar and unfamiliar situations -ii. Apply the selected mathematics successfully when solving problems -iii. Solve problems correctly in a variety of contexts. Objective B: Investigating patterns -i. Select and apply mathematical problem-solving techniques to discover complex patterns -iii. Verify and justify relationships and/or general rules. Objective C: Communicating	Social – Collaboration skills: • Listen actively to other perspectives and ideas. Thinking – Critical thinking skills: • Evaluate evidence and arguments. • Gather and organize relevant information to formulate an argument. Learner Profile Principled	Pythagoras theorem Trigonometric ratios in right angled triangles. Trigonometry, Application of Sine rule, cosine rule, and tangent rule. Trigonometry in context including angle of elevation/depression/bearings Solve 3D problems involving right angled triangles Transformations of linear/quadratic/ exponential/reciprocal/sine/cosin e/log functions (Translations/Reflections/Stretche s)	Summative: Creative uses for Drones Criterion A: Knowing and understanding

						-ii. Use appropriate			
						forms of			
						mathematical			
						representation to			
						present information			
						-v. Organize			
						information using a			
						logical structure			
						Objective D:			
						Applying			
						mathematics in			
						real-life contexts			
						-iv Explain the			
						degree of accuracy			
						of a solution			
						-v Explain whether			
						a solution makes			
						sense in the context			
						of the authentic			
						real-life situation			
4	How can	Logic	Snace	Personal and	Annlying	Year 3 Objectives	Social –	Plotting points in cartesian	Summative:
-	How can	LOBIC	Space	cultural	mathematical	Objective Δ	Collaboration	nlane Connecting dots and	Summative.
	we			expression	logic to spatial	Knowing and	skills	Pythagoras theorem Midnoint	Create an idea
	move in			expression	dimensions	understanding	• Giving and	on graphs Curves from lines	for a mobile
	space?				can onen	-i Select	receiving	Gradient $y = mx + c$	ann
				Exploration	nersonal	annronriate	meaningful	lines perpendicular lines	app
				Products	cultural and	mathematics when	feedback	Fountions on granhs	
				systems and	social	solving problems in	Thinking -	Construction of perpendicular	Criterion C
				institutions	entrenreneurs	both familiar and	Creative	lines 3D vectors	Communicati
				institutions	hin	unfamiliar situations	thinking skills.	Metric conversions Volume of	ng
					opportunities	-ii Apply the	Create	regular polybedron Movement	116
					opportunities.	selected	original works	on a plane isometric	
						mathematics	and ideas: use	transformations enlargements	
						successfully when	evisting works	and tessellations	
						solving problems	and ideas in		
						-iii Solve problems			
						correctly in a variety	new ways.		
						of contexts	Learner Profile		
						Ohiective R.	Communicator		
						Investigating	communicator		
						natterns			
						-i Select and apply			
						mathematical			
						nrohlem-solving			
	1	1	1	1	1	hiometri-solving	1		1

						techniques to			
						discover complex			
						patterns			
						-iii. Verify and justify			
						relationships and/or			
						general rules.			
						Objective C:			
						Communicating			
						-i. Use appropriate			
						mathematical			
						language (notation,			
						symbols and			
						terminology) in both			
						oral and written			
						explanations -ii. Use			
						appropriate forms			
						of mathematical			
						representation to			
						present information			
						-iii. Move between			
						different forms of			
						mathematical			
						representation -iv.			
						Communicate			
						complete and			
						coherent			
						mathematical lines			
						of reasoning -v.			
						Organize			
						information using a			
						logical structure.			
						Objective D:			
						Applying			
						mathematics in			
						real-life contexts			
						-i. Identify relevant			
						elements of			
						authentic real-life			
						situations			
-	Ctatistic-	Deletier	Change	Feimerer and	M/a must a al-	Veen 2 Objective	Communicatio	lateraretetica of such a	Cummenting
5	Statistica	Relation	change	Fairness and	vve must ask	Tear 3 Objectives		Interpretation of graphs	summative:
	i Analysis	snips		Development	ule right	Objective A: Knowing and	II SKIIIS:	Standard doviation	Anti hulluina
									Anti-bullying
				1	measure the	understanding	and use		campaign

		Exploration:	correct data to	-i. Select	mathematical	Draw and use histograms with	
		Inequality.	understand	appropriate	notation	unequal class intervals Calculate	
		difference. and	relationships	mathematics when	Organize and	limits of compound measures	Criterion A:
		inclusion	so we can use	solving problems in	depict	(inequality form) Calculations	Knowing and
			information to	both familiar and	information	involving upper and lower bounds	understanding
			make the	unfamiliar situations	logically.	5	
			world a better	-ii. Apply the	Thinking –		
			and fairer	selected	Critical		Criterion D:
			place.	mathematics	thinking skills:		Applying
				successfully when	• Evaluate		mathematics
				solving problems	evidence and		in real-life
				-iii. Solve problems	arguments.		contexts
				correctly in a variety	• Test		
				of contexts.	generalizations		
				Objective C:	and		
				Communicating	conclusions.		
				-i. Use appropriate	Research –		
				mathematical	Information		
				language (notation,	Literacy skills:		
				symbols and	 Finding, 		
				terminology) in both	interpreting,		
				oral and written	judging, and		
				explanations	creating		
				Objective D:	information.		
				Applying			
				mathematics in	Learner Profile		
				real-life	Caring		
				contexts	Open minded		
				-i. Identify relevant			
				elements of			
				authentic real-life			
				situations			
				-ii. Select			
				appropriate			
				mathematical			
				strategies when			
				solving authentic			
				real-life situations			
				-iii. Apply the			
				selected			
				mathematical			
				strategies			
				successfully to reach			
				a solution			

			-iv. Explain the		
			degree of accuracy		
			of a solution		
			-v. Explain whether		
			a solution makes		
			sense in the context		
			of the authentic		
			real-life situation.		

MYP-V

Serial	Unit Name	Key Concept	Related	Global Context	Statement Of	MYP Objectives	Approaches To	Content	Assessment
No.			Concepts		Inquiry		Learning		
1	Mastering	Logic	Quantity	Fairness and	The differences	Year 5	Communication	Solve algebraic	Summative:
	Inequalities			Development	between	Objectives	skills:	inequalities in	
					quantities can	Objective A:	 Understand 	one variable	Prove the
					be represented	Knowing and	and use	using a	Fibonacci
				Exploration:	by inequalities,	understanding	mathematical	combination of	sequence
				Inequality,	which allows us	i. Select	notation	the properties of	
				difference, and	to solve and	appropriate	 Use and 	inequality.	
				inclusion	logically	mathematics	interpret a	Represent	Criterion C:
					address	when solving	range of	inequalities on a	Communicating.
					inequality in	problems in	discipline	number line.	Criterion D:
					Mathematics	both familiar	specific terms	Solve absolute	Applying
					and life.	and unfamiliar	and symbols.	value inequalities	mathematics in
						situations	Thinking –	in one variable	real-life
						Objective B:	Transfer skills:	using the	contexts
						Investigating	 Inquire in 	Properties of	
						patterns	different	Inequality.	
						i. select and	contexts to gain	Develop	
						apply	a different	inequalities to	
						mathematical	perspective.	represent real	
						problem-solving	Self-	world situations	
						techniques to	management –	and use them to	
						discover	Affective skills:	solve problems.	
						complex	Resilience	Represent	
						patterns	practice	inequalities using	
						ii. describe	'bouncing back'	graphs. Find the	
						patterns as	after adversity,	nth term of a	
						general rules	mistakes and	linear sequence.	
						consistent with	failures;	Identify the	
						findings	Practise 'failing	geometric	
						iii. prove, or	well'.	sequence	
						verify and		Absolute values	
						justify, general	Learner Profile	Representing and	
						rules.	Caring	solving	
						Objective C:		inequalities,	
						Communicating		including	
						i. use		compound and	
						appropriate		double	
						mathematical		inequalities	
						language		Irrational	
						(notation,		numbers	

	-		aumhola and	Number	
			symbols and	Number	
			terminology) in	sequences	
			both oral and	(prediction,	
			written	description)	
			explanations		
			ii. use		
			appropriate		
			forms of		
			mathematical		
			representation		
			to present		
			information iii.		
			move between		
			different forms		
			of		
			mathematical		
			representation		
			iv.		
			communicate		
			complete,		
			coherent and		
			concise		
			mathematical		
			lines of		
			reasoning		
			v. organize		
			information		
			using a logical		
			structure.		
			Objective D:		
			Applying		
			mathematics in		
			real-life		
			contexts		
			i. identify		
			relevant		
			elements of		
			authentic real-		
			life situations		
			ii. select		
			appropriate		
			mathematical		
			strategies when		
			solving		
			331115		

						authentic real- life situations iii. apply the selected mathematical strategies successfully to reach a solution iv. justify the degree of accuracy of a solution v. justify whether a solution makes sense in the context of the authentic real- life situation.			
2	Discovering Quadratic Mysteries	Relationships	Representation	Globalization and sustainability Exploration: Data-driven decision- making	Representing relationships visually and algebraically can allow us to find and optimize 'best case scenarios' and sustainable solutions.	Year 5 Objectives Objective A: Knowing and understanding i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations ii. apply the selected mathematics successfully when solving problems iii. solve problems correctly in a	Self- management – Reflection skills: • Consider the process of learning; choosing and using ATL skills. Communication skills: • Give and receive meaningful feedback. Research – Information Literacy skills: • Finding, interpreting, judging, and creating information.	Identify the quadratic equation Identify the standard form of a quadratic equation Find the value of the discriminant and find the nature of the roots. Frame the quadratic equation for the given roots Solve the quadratic equation graphically Solve the quadratic equation by factorization.	Summative: Solve by using quadratic formula Criterion A: Knowing and understanding. Criterion D: Applying mathematics in real-life contexts

			variety of		
			contexts	Learner Profile	
			Objective B:	Openminded	
			Investigating	Principled	
			nottorno	Fincipieu	
			patterns		
			i. select and		
			арріу		
			mathematical		
			problem-solving		
			techniques to		
			discover		
			complex		
			patterns		
			ii. describe		
			patterns as		
			general rules		
			consistent with		
			findings		
			Objective C:		
			Communicating		
			i. use		
			appropriate		
			mathematical		
			Instation		
			symbols and		
			terminology) in		
			both oral and		
			writton		
			ovelopations		
			II. USE		
			appropriate		
			forms of		
			mathematical		
			representation		
			to present		
			information iii.		
			move between		
			different forms		
			of		
			mathematical		
			representation		
			iv.		
			communicate		

						complete,			
						coherent and			
						concise			
						mathematical			
						lines of			
						reasoning			
						Objective D:			
						Annlying			
						mathematics in			
						roal life			
						real-life			
						contexts			
						I. Identify			
						relevant			
						elements of			
						authentic real-			
						life situations			
						ii. select			
						appropriate			
						mathematical			
						strategies when			
						solving			
						authentic real-			
						life situations			
						iii apply the			
						selected			
						mathematical			
						stratogios			
						successfully to			
						successfully to			
						reach a solution			
						iv. justify the			
						degree of			
						accuracy of a			
						solution			
						v. justify			
						whether a			
						solution makes			
						sense in the			
						context of the			
						authentic real-			
						life situation.			
3	Coordinate	Form	Validity	Orientation in	Statements	Year 5	Communication	Identify the parts	Summative:
	Geometry		, ,	space and time	about the	Objectives	skills:	of a circle	_
	,				spaces and		• Use and	Investigate the	
					shapes around		interpret a	angle in a comi-	
1	1	1	1	1	shapes around	1	merpiera	angle in a serilis	1

		Exploration:	us can he	Objective A:	range of	circle Investigate	Proofs (evolain
		Scale duration	validated to	Knowing and	discipline	the angles in the	iustify and
		frequency and	show they are	understanding	specific terms	same segment	prove)
		variability	invariant	i soloct	and symbols	Investigate cyclic	provej
		variability	through space	appropriato	Thinking -	auadrilatorals	Critorion A:
			and time	mathematics	Critical thinking	Idontify the angle	Knowing and
			anu time.	when colving		botwoon tongont	understanding
				when solving	SKIIIS.	between tangent	understanding.
				problems in			Ohiostive D.
					organize		Objective B:
				and unramiliar	relevant	Prove and use	investigating
				situations	Information to	the alternate	patterns
				ii. apply the	formulate an	segment	
				selected	argument.	theorem.	Criterion D:
				mathematics	Analyse	Identify the circle	Applying
				successfully	complex	wave Similarity	mathematics in
				when solving	concepts and	and congruence	real-life
				problems	projects into	Coordinate	contexts
				iii. solve	their	geometry,	
				problems	constituent	including	
				correctly in a	parts and	distance,	
				variety of	synthesize	midpoint and	
				contexts.	them to create	gradient formula	
					new	Gradients and	
				Objective B:	understanding.	intercepts (see	
				Investigating	Research –	also functions	
				patterns	Media Literacy	and models)	
				i. select and	skills:	Gradient of	
				apply	 Locate, 	parallel lines	
				mathematical	organize,	Circle geometry	
				problem-solving	analyse,	Rotation around	
				techniques to	evaluate,	a given point	
				discover	synthesize and		
				complex	ethically use		
				patterns	information		
				ii. describe	from a variety		
				patterns as	of sources and		
				general rules	media.		
				consistent with			
				findings	Learner Profile		
				iii. prove, or	Thinker		
				verify and			
				justify, general			
				rules.			

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Image: second							authentic real-			
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andand forms,appropriatelearning;using functions,cooperation;which allows usmathematicschoosing andincluding pieceCriterion B:					Competition	various models	i. selects	the process of	life situations	
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					cooperation:	which allows us	mathematics	choosing and	including piece	Criterion B:
teams. to solve and when solving using ATL skills: wise functions Investigating					teams.	to solve and	when solving	using ATL skills:	wise functions	Investigating
predict these problems in • Identify Patterns.					,	predict these	problems in	Identify		Patterns.

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			real-world		strengths and	investigate the	
		leadership	relationships.	and unfamiliar	weaknesses of	power of 5	
				situations	personal	Solve the	Criterion C:
				Objective B:	learning	exponential	Communicating.
				Investigating	strategies (self–	equations	
				patterns	assessment)	Identify different	
				i. select and	Communication	forms of function	
				apply	skills:	Evaluate Moore's	
				mathematical	• Make	law	
				problem-solving	effective	Mappings	
				techniques to	summary notes	Function	
				discover	for studying.	notation Linear	
				complex	Self-	functions $v = mx$	
				natterns	management -	+ c (see also	
				ii describe	Organization	snatial	
				nattorns as	ckille	spatial	
				patterns as	SKIIIS.	Derallel and	
				general rules	• Use	Parallel allu	
				consistent with	appropriate	perpendicular	
				findings	strategies for	lines (see also	
				III. prove, or	organizing	spatial	
				verify and	complex	reasoning)	
				justify, general	information.	Systems of	
				rules.		equations/	
				Objective C:	Learner Profile	simultaneous	
				Communicating	Inquirer	equations	
				i. use		Quadratic	
				appropriate		functions	
				mathematical		Algorithms	
				language			
				(notation,			
				symbols and			
				terminology) in			
				both oral and			
				written			
				explanations			
				ii. use			
				appropriate			
				forms of			
				mathematical			
				representation			
				to present			
				information iii			
				move between			
				different forms			
1			1	unterent forms	1		

						of mathematical representation iv. communicate complete, coherent and concise mathematical lines of reasoning v. organize information using a logical structure. Objective D: Applying mathematics in real-life contexts i. identify relevant elements of authentic real- life situations ii. select appropriate mathematical strategies when solving authentic real- life situations iii. apply tho			
						life situations iii. apply the selected mathematical strategies successfully to reach a solution			
5	Am I ready?	Relationships	Systems	Scientific and technical innovation	Your future relationship with mathematics will be	Year 5 Objectives Objective A: Knowing and understanding	Communication skills: • Organize and depict information	Getting ready for DP Solve Linear and simultaneous equations,	Summative: Create a beginner's

		Exploration:	determined by	i. select	logically.	Calculate the	guide to careful
		Opportunity,	your	appropriate	Thinking –	trigonometric	construction.
		risk,	understanding	mathematics	Critical thinking	values Solve	
		consequences	of both	when solving	skills:	quadratic	
		and	traditional and	problems in	 Evaluate 	equations	Criterion A:
		responsibility	innovative	both familiar	evidence and	Investigate the	Knowing and
			systems.	and unfamiliar	arguments.	sieve of	understanding.
				situations		Eratosthenes,	
				ii. apply the		Represent the	Criterion B:
				selected	Learner Profile	parabolas,	Investigating
				mathematics	Knowledgeable	Calculate the	Patterns
				successfully	0	angles of	
				when solving		polygons. Prove	
				problems		the Pythagorean	
				iii. solve		theorem	
				problems		Constructions	
				correctly in a		constructions	
				variety of			
				contexts			
				Objective B.			
				Investigating			
				nattorns			
				i coloct and			
				appiy			
				nrohlom coluing			
				problem-solving			
				discover			
				ascover			
				complex			
				n. describe			
				patterns as			
				general rules			
				consistent with			
				tindings			
				III. prove, or			
				verity and			
				Justity, general			
				rules.			
				Objective C:			
				Communicating			
				i. use			
				appropriate			
				mathematical			

		language (notation, symbols and terminology) in both oral and written explanations Objective D: Applying mathematics in real-life		
		elements of authentic real- life situations ii. select appropriate mathematical strategies when solving authentic real-		
		life situations		