MYP Mathematics – Grade 7							
Topic/Unit Title	**Key Concept**	**Related Concepts**	**Global Context /Exploration**	**Statement of Inquiry**	**ATL skills**	**Summative Assessments**	**Assessment Objectives**
Numerical and abstract reasoning	Logic		Globalization and human impact on the environment, consumption, data-driven decision-making, markets.	A logical process helps us simplify quantities and make informed decisions regarding the opportunities of achieving sustainability	Self-management Risk-taking Thinking	Students' academic levels will be assessed through formative assessments and summative assessments to meet the objectives. Generally, criteria A, B and D are assessed with different kinds of tasks. Criterion C is often used to assess constructed responses and reports in combination with criterion B or D. Rounding and estimation -Integers -Square numbers -Absolute values -Fractions and Decimals operations -Order of Operations -Ratios and proportions -Rate -FDP -Algebraic Expressions -Solving equations -factoring simple quadratics	Criterion A-Knowing and understanding This objective requires students to demonstrate knowledge and understanding of the concepts and skills of the four branches in the prescribed framework (numerical and abstract reasoning, thinking with models, spatial reasoning, and reasoning with data). In order to reach the aims of mathematics, students should be able to: select appropriate mathematics when solving problems in both familiar and unfamiliar situations apply the selected mathematics successfully when solving problems solve problems correctly in a variety of contexts. Criterion B- Investigating patterns
Thinking with models	Relationship	Model, pattern	Scientific and technical innovation	Social Thinking	By observing a pattern, we can find a relationship between objects	Students' academic levels will be assessed through formative assessments and summative assessments to meet the	This objective allows students to experience the excitement and satisfaction of

					and model the real-life situation.	objectives. Generally, criteria A, B and D are assessed with different kinds of tasks. Criterion C is often used to assess constructed responses and reports in combination with criterion B or D. -Coordinate geometry -Linear relationships -slope of a line -Transformations	mathematical discovery. Working through investigations encourages students to become risk-takers, inquirers and critical thinkers. The ability to inquire is invaluable in the MYP and contributes to lifelong learning. In order to reach the aims of mathematics, students should be able to: apply mathematical problem-solving techniques to recognize patterns describe patterns as relationships or general rules consistent with correct findings verify whether the pattern works for other examples Criterion C-Communication Students are expected to use appropriate mathematical language and different forms of representation when communicating mathematical ideas, reasoning and findings, both orally and in writing. In order to reach the aims of mathematics, students should be able to:
Spatial Reasoning	Form	Measurement, representation	Orientation in space and time	Research, communication	Understanding form and measurement enhances representation.	Students' academic levels will be assessed through formative assessments and summative assessments to meet the objectives. Generally, criteria A, B and D are assessed with different kinds of tasks. Criterion C is often used to assess constructed responses and reports in combination with criterion B or D. Units of measurement -Area -surface area and Volume	

						-Transversal lines -polygons (Interior and exterior angles)	use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements use appropriate forms of mathematical representation to present information communicate coherent mathematical lines of reasoning iv. organize information using a logical structure. Criterion D-Real life application Students are expected to transfer theoretical mathematical knowledge into real-world situations and apply appropriate problem-solving strategies, draw valid conclusions and reflect upon their results.- In order to reach the aims of mathematics, students should be able to: identify relevant elements of i. authentic real-life situations select appropriate ii. mathematical strategies when solving authentic real-life situations apply the selected iii. mathematical strategies successfully to reach a
Reasoning with data	Form	Equivalence, representation	Scientific and technical innovation	Communication, Thinking	Different forms can make quantities easier to understand and use in everyday life.	Students' academic levels will be assessed through formative assessments and summative assessments to meet the objectives. Generally, criteria A, B and D are assessed with different kinds of tasks. Criterion C is often used to assess constructed responses and reports in combination with criterion B or D. Reasoning with data: Simple discrete data and classifications Data collection and generation (including • surveys) Graphical representations (including: pie charts, bar charts, stem and leaf plots, pictograms Averages Probabilities ,	

							solution explain the degree of iv. accuracy of a solution describe whether a solution v. makes sense in the context of the authentic real-life situation.
Service as Actioin							
Real life application task where students had to calculate the gradient of slopes around the school and then research and check to make sure that they fall within the health and safety guidelines outlined by the UAE authorities.							

Please note: At times areas of the curriculum will change based on the learning needs and interests of the students.