

Integration of Areas of Interaction	Content	Assessments and MYP Criteria Assessed	Content Standards (Grade 8 th grade math standards)	Essential Content Skills
Unit Theme/Topic: Story of Mathematics and the Predictive power of mathematics taught through Coordinate Geometry and linear functions. Area of Interaction Focus (AofI): Environment/Health and Social Guiding Questions: How reliable are mathematical predictions about the future? Duration: 4 weeks	Story of Linear Functions – Distance Slope Midpoint Pythagorean Theorem Systems of Linear Equations Multiple Representations of Functions Lines of Fit Point-Slope form of linear functions.	Quarterly Mini-Project: Find the centroid of a specific triangle and make connections to the real world. Criteria A, and C. Unit Test and Quizzes: Criteria A, and B. Investigation: Why do we measure things to an answer? This is clearly indicated to a student the guiding questions (local investigation). A full focus – How it is not visible! Criteria D.	3.1 a 3.3 a 3.3 b 3.3 c 3.3 d 3.3 e 3.4 a 3.4 c	Use of Graphing Calculator, Read and interpret graphs, functions equations and charts, plot points, graph lines, make algebraic expressions equations and expressions.
Unit Theme/Topic: Inductive Reasoning versus deductive reasoning taught through Angle relationships and Polygon Sum A of I Focus: Environmental Guiding Questions: Inductive reasoning is an important tool in mathematics, how is it used for destructive purposes? Duration: 3 to 4 weeks	The Story of Inductive Reasoning – Mathematics, the search for truth. Parallel lines cut by a transversal Sum of interior angles of a polygon The triangle as a tool to understand and more complex geometric relationships. Algebraic expressions in length and a right triangle. Proving the triangle is 180°	Investigation: What is a transversal? A full focus – Inductive reasoning Unit Test and Quizzes: Criteria A, and B. Investigation: Solving a crime through deductive and inductive reasoning. (Triangle interior angles)		Geometric Sketchpad, Use of Graphing Calculator as a tool to make measurements, Patterns, make predictions, algebraic expressions, solving equations, solving equations, use of a protractor
Unit Theme/Topic: Deductive Reasoning taught through triangle congruence and quadrilateral properties. A of I Focus: Home/Fiber Guiding Questions: How are mathematics and science different? How are they the same? Duration: 3 to 4 weeks	Triangle congruence theorems ASA, SAS, SSS, HL, AAS Properties of Quadrilaterals Parallel lines, Transversal, Rhombus, Squares Prove the Pythagorean Theorem through dissection.	Investigation: Alternating proof of Pythagorean theorem – Geometric Proof. Criteria A, and C. This activity is intended to add to the existing question. A full Home/Fiber. Unit Test and Quizzes: Criteria A, and B.	4.1 a 4.3 a 4.3 b	Geometric Sketchpad, Make algebraic expressions, Pythagorean Theorem.