

Unit Length in Weeks	4 weeks	8 weeks	4 weeks	12 weeks	8 weeks
Unit Name	Unit 1 Chapter 1 Probability <ul style="list-style-type: none"> • Introductions and Probability 	Unit 2 Chapter 2 Operations <ul style="list-style-type: none"> • Fractions and Integer Addition 	Unit 3 Chapters 3 and 4 Linear Comparison <ul style="list-style-type: none"> • Arithmetic Properties, Proportions, and Expressions 	Unit 4 Chapters 5 and 6 Algebraic Modeling <ul style="list-style-type: none"> • Probability and Solving Word Problems • Solving Inequalities and Equations 	Unit 5 Chapters 8 and 9 Geometric Modeling and Measurement <ul style="list-style-type: none"> • Statistics and Angle Relationships • Circles and Volume
Standard	Standard Number Three <i>Data Analysis, Statistics, and Probability</i>	Standard Number One <i>Number Sense, Properties, and Operations</i>	Standard Number Two <i>Patterns, Functions, and Algebraic Structures</i>	Standard Number Two <i>Patterns, Functions, and Algebraic Structures</i>	Standard Number Four <i>Shape, Dimension, and Geometric Relationships</i>
Key Concepts	<p>Relationships</p> <p><u>Relationships</u> allow students to identify and understand connections and associations between properties, objects, people and ideas—including the human community’s connections with the world in which we live. Any change in relationships brings consequences—some of which may occur on a small scale, while others may be far-reaching, affecting large systems like human societies and the planet as a whole. <u>Relationships in MYP mathematics</u> refers to the connections between quantities, properties or concepts and these connections may be expressed as models, rules or statements. Relationships provide opportunities for students to explore patterns in the world around them. Connections between the student and mathematics in the real world are important in developing deeper understanding.</p>	<p>Relationships</p> <p><u>Relationships</u> allow students to identify and understand connections and associations between properties, objects, people and ideas—including the human community’s connections with the world in which we live. Any change in relationships brings consequences—some of which may occur on a small scale, while others may be far-reaching, affecting large systems like human societies and the planet as a whole. <u>Relationships in MYP mathematics</u> refers to the connections between quantities, properties or concepts and these connections may be expressed as models, rules or statements. Relationships provide opportunities for students to explore patterns in the world around them. Connections between the student and mathematics in the real world are important in developing deeper understanding.</p>	<p>Logic</p> <p><u>Logic</u> is a method of reasoning and a system of principles used to build arguments and reach conclusions. <u>Logic in MYP mathematics</u> is used as a process in making decisions about numbers, shapes, and variables. This system of reasoning provides students with a method for explaining the validity of their conclusions. Within the MYP, this should not be confused with the subfield of mathematics called “symbolic logic.”</p>	<p>Relationships</p> <p><u>Relationships</u> allow students to identify and understand connections and associations between properties, objects, people and ideas—including the human community’s connections with the world in which we live. Any change in relationships brings consequences—some of which may occur on a small scale, while others may be far-reaching, affecting large systems like human societies and the planet as a whole. <u>Relationships in MYP mathematics</u> refers to the connections between quantities, properties or concepts and these connections may be expressed as models, rules or statements. Relationships provide opportunities for students to explore patterns in the world around them. Connections between the student and mathematics in the real world are important in developing deeper understanding.</p>	<p>Form</p> <p><u>Form</u> is the shape and underlying structure of an entity or piece of work, including its organization, essential nature and external appearance. <u>Form in MYP mathematics</u> refers to the understanding that the underlying structure and shape of an entity is distinguished by its properties. Form provides opportunities for students to appreciate the aesthetic nature of the constructs used in a discipline.</p>
Related Concepts	<p>Representation: the manner in which something is presented.</p> <p>Simplification: the process of reducing to a less complicated form.</p> <p>Justification: valid reasons or evidence used to support a statement.</p>	<p>Patterns: a set of numbers or objects that follow a specific rule or order.</p> <p>Quantity: an amount or number.</p> <p>Simplification: the process of reducing to a less complicated form.</p>	<p>Measurement: a method of determining quantity, capacity, or dimension using a defined unit.</p> <p>Quantity: an amount or number.</p> <p>Space: the frame of geometrical dimensions describing an entity.</p>	<p>Change: a variation in size, amount, or behavior.</p> <p>Equivalence: the state of being identically equal or interchangeable, applied to statements, quantities, or expressions.</p> <p>Justification: valid reasons or evidence used to support a statement.</p> <p>Model: a depiction of a real-life event using expressions, equations, or graphs.</p>	<p>Measurement: a method of determining quantity, capacity, or dimension using a defined unit.</p> <p>Generalization: a general statement made on the basis of specific examples.</p> <p>Pattern: a set of numbers or objects that follow a specific rule or order.</p> <p>Space: the frame of geometrical dimensions describing an entity.</p>

<p>Global Context</p>	<p>Fairness and Development</p> <p>What are the consequences of our common humanity?</p> <p>Students will explore rights and responsibilities; the relationship between communities; sharing finite resources with other people and with other living things; access to equal opportunities; peace and conflict resolution.</p> <p>Possible explorations to develop:</p> <ul style="list-style-type: none"> • democracy, politics, government and civil society • inequality, difference and inclusion • human capability and development ; social entrepreneurs • rights, law, civic responsibility and the public sphere • justice, peace and conflict management • power and privilege • authority , security and freedom • imagining a hopeful future 	<p>Scientific and Technical Innovation</p> <p>How do we understand the worlds in which we live?</p> <p>Students will explore the natural world and its laws; the interaction between people and the natural world; how humans use their understanding of scientific principles; the impact of scientific and technological advances on communities and environments; the impact of environments on human activity; how humans adapt environments to their needs.</p> <p>Possible explorations to develop:</p> <ul style="list-style-type: none"> • systems, models, methods; products, processes and solutions • adaptation, ingenuity and progress • opportunity, risk, consequences and responsibility • modernization, industrialization and engineering • digital life, virtual environments and the information age • the biological revolution • mathematical puzzles, principles and discoveries 	<p>Scientific and Technical Innovation</p> <p>How do we understand the worlds in which we live?</p> <p>Students will explore the natural world and its laws; the interaction between people and the natural world; how humans use their understanding of scientific principles; the impact of scientific and technological advances on communities and environments; the impact of environments on human activity; how humans adapt environments to their needs.</p> <p>Possible explorations to develop:</p> <ul style="list-style-type: none"> • systems, models, methods; products, processes and solutions • adaptation, ingenuity and progress • opportunity, risk, consequences and responsibility • modernization, industrialization and engineering • digital life, virtual environments and the information age • the biological revolution • mathematical puzzles, principles and discoveries 	<p>Scientific and Technical Innovation</p> <p>How do we understand the worlds in which we live?</p> <p>Students will explore the natural world and its laws; the interaction between people and the natural world; how humans use their understanding of scientific principles; the impact of scientific and technological advances on communities and environments; the impact of environments on human activity; how humans adapt environments to their needs.</p> <p>Possible explorations to develop:</p> <ul style="list-style-type: none"> • systems, models, methods; products, processes and solutions • adaptation, ingenuity and progress • opportunity, risk, consequences and responsibility • modernization, industrialization and engineering • digital life, virtual environments and the information age • the biological revolution • mathematical puzzles, principles and discoveries 	<p>Scientific and Technical Innovation</p> <p>How do we understand the worlds in which we live?</p> <p>Students will explore the natural world and its laws; the interaction between people and the natural world; how humans use their understanding of scientific principles; the impact of scientific and technological advances on communities and environments; the impact of environments on human activity; how humans adapt environments to their needs.</p> <p>Possible explorations to develop:</p> <ul style="list-style-type: none"> • systems, models, methods; products, processes and solutions • adaptation, ingenuity and progress • opportunity, risk, consequences and responsibility • modernization, industrialization and engineering • digital life, virtual environments and the information age • the biological revolution • mathematical puzzles, principles and discoveries
<p>Criterion Objectives/Strand Assessment Task</p>	<p>Criteria A – Knowing and Understanding <i>Students must know and understand the concepts and skills of the prescribed framework in mathematics.</i></p> <p>Criteria B – Investigating Patterns <i>Through investigation students become risk-takers, inquirers, and critical thinkers.</i></p> <p>Classroom test with groups in real-life situations.</p>	<p>Criteria A – Knowing and Understanding <i>Students must know and understand the concepts and skills of the prescribed framework in mathematics.</i></p> <p>Criteria C – Communicating <i>Students are expected to use correct mathematical thinking, mathematical language, and representation when communicating mathematical ideas both orally and written.</i></p>	<p>Criteria D – Applying Math to Real Life Context <i>Students are expected to transfer mathematical knowledge into real-world situations, apply problem-solving strategies, and draw valid conclusions.</i></p>	<p>Criteria C – Communicating <i>Students are expected to use correct mathematical thinking, mathematical language, and representation when communicating mathematical ideas both orally and written.</i></p> <p>Criteria A – Knowing and Understanding <i>Students must know and understand the concepts and skills of the prescribed framework in mathematics.</i></p>	<p>Criteria D – Applying Math to Real Life Context <i>Students are expected to transfer mathematical knowledge into real-world situations, apply problem-solving strategies, and draw valid conclusions.</i></p>
<p>ATL Skill</p>	<p>Communication <i>Organizing and interpreting data using both analog and digital tools.</i></p>	<p>Thinking <i>Use prioritizing and order of procedure in problem-solving.</i></p>	<p>Thinking <i>Use prioritizing and order of procedure in problem-solving.</i></p>	<p>Self-Management Skills <i>Practice focus and concentration while solving multiple problems.</i></p>	<p>Social Skills <i>Help others create success for themselves during group work while striving to understand mathematical concepts.</i></p>
<p>MDC</p>	<p>Design a Garden – Drawing to Scale Money Munchers – Estimations and Approximations</p>	<p>Counting Trees – Estimating October = Using Positive/Negative Numbers in Context (temperature)</p>	<p>November = Counting Trees – Estimating Developing a Sense of Scale</p>	<p>End of Ch 6 = Steps to Solving Equations Problem Solving Gold Rush – Maximizing Area</p>	<p>Designing a Sport Bag – Using Dimensions</p>