|  |  |  |  |
| --- | --- | --- | --- |
| **MYP Year:** | 1 | **Subject Group:** | Math |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Unit Title** | **Key Concept** *(1)* | **Related Concepts** *(2)* | **Global Context** *(1)* | **Statement of Inquiry**  *(1 + 2 + 1)* | **MYP subject-group objective(s)**  *(Assessment Criteria)* | **Content** (topics, knowledge, skills) | |
| **Ratios and Proportions** | Relationships | Equivalence  Simplification | Globalization and Sustainability | We use proportional relationships to communicate information. | A, C | Ratios; Unit rates;  Proportions; Converting between fractions, decimals, and percents; If the world were 100 People | |
| **ATL Skills** | *(goal is how to be a successful student in math class, and explain reasoning for answers)*  **Category:** Communication **Cluster:** Communication **Skill Indicator:** Reading, writing, and using language to gather and communicate information  **Category:** Self-management  **Cluster:**  Organization **Skill Indicator:** managing time and tasks effectively  **Category:** Thinking **Cluster:** Critical Thinking **Skill Indicator:** Analyzing and evaluating issues and ideas | | | | | |
| **The Number System** | Relationships | Representation  Systems | Globalization and Sustainability | We use relationships in the number system to represent real world situations. | A, D | Adding and subtracting decimals; Estimating products; Multiplying and dividing decimals; Multiplying and dividing multi-digit numbers; Multiplying by powers of 10;  Multiplying and dividing fractions | |
| **ATL Skills** | *(goal is see the value of having computational math skills and complete each part of the summative task independently)*  **Category:** Self-Management **Cluster:** Affective **Skill Indicator:** Perseverance  **Category:** Thinking **Cluster:** Critical Thinking **Skill Indicator:**  Use models and simulations  **Category:** Self-Management **Cluster:** Reflection **Skill Indicator:** Demonstrate flexibility in the selection and use of learning strategies. | | | | | |
| **Integers and Expressions** | Logic | Quantities  Patterns | Orientation in Time and Space | We identify patterns using logic to determine unknown quantities. | A,B | Integers (positive and negative numbers); Absolute value; Terminating and repeating decimals; Rational numbers;Graphing on a coordinate plane; Finding distance on a coordinate plane; Powers and Exponents; Numerical Expressions; Variables and Expressions; Writing Expressions; Distributive Property; Equivalent expressions | |
| **ATL Skills** | *(goal: continue to work more independently, be able to start task without additional guidance)*  **Category:** Self-Management **Cluster:** Self-motivation **Skill Indicator:** practice positive thinking  **Category:** Thinking  **Cluster:** Creative-thinking **Skill Indicator:** practice visible thinking strategies and techniques  **Category:** Thinking **Cluster:**  Critical-thinking **Skill Indicator:** use models and simulations to explore complex systems and issues. | | | | | |
| **Equations and Inequalities** | Relationships | Patterns  Representations | Personal and Cultural Expression | The language of Algebra allows us to communicate relationships between numbers. | A, B | Exponents; Variables;  Expressions; Distributive property; 1-step equations;  Functions; inequalities | |
| **ATL Skills** | *(goal: apply previous learning to new concepts and situations)*  **Category:** Thinking **Cluster:** Creative thinking **Skill Indicator:** Apply existing knowledge to generate new ideas, products, or processes  **Category:** Thinking  **Cluster:** Transfer **Skill Indicator:** Apply skills and knowledge in unfamiliar situations | | | | | |
| **Geometry** | Form | Measurements  Space | Personal and Cultural Expression | Through form, space and measurement are created. | A, C | Area of parallelograms, triangles, trapezoids; Change in dimensions affect on area and perimeter; Graphing polygons on coordinate plane; Area of composite figures; Volume of rectangular prisms, triangular prisms; Surface area of rectangular prisms, triangular prisms; Nets | |
| **ATL Skills** | *(goal: write about math and perform open ended tasks)*  **Category:** Communication **Cluster:** Communication Skills **Skill Indicator:** Organize and depict information logically  **Category:** Communication **Cluster:** Communication Skills **Skill Indicator:** Understand and use mathematical notation  **Category:** Thinking **Cluster:** Transfer **Skill Indicator:** apply skills and knowledge in unfamiliar situations  **Category:** Self-Management  **Cluster:** Affective Skills **Skill Indicator:** Demonstrate persistence and perseverance | | | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Statistics** | Power | Representation  Models | Fairness and  Development | Statistics are a powerful model for representing information. | A, D | Statistical question; Measures of central tendency (mean, median, mode); Measures of variation (quartiles, range, IQR); Mean Absolute Deviation; Selecting appropriate measures of central tendency; Represent data in graphs: line plots, histograms, box plots, line graphs; Shape of Distribution; Selecting appropriate displays | |
| **ATL Skills** | *(goal: evaluate news sources for bias and false statements)*  **Category:** Research **Cluster:** Media Literacy **Skill Indicator:** locate, organize, analyze, evaluate, synthesize, and ethically use information  **Category:** Thinking **Cluster:** Critical Thinking **Skill Indicator:** Recognize unstated assumptions and bias  **Category:** Self-management **Cluster:** Reflection **Skill Indicator:** Consider personal learning strategies | | | | | |