**MYP Subject: Mathematics**

**MYP Year: 2**

| | Unit 1 | Unit 2 | Unit 3 | Unit 4 | Unit 5 |
|---|---|---|---|---|---|
| **Unit title** | **Patterns in Algebra and Algebraic Expressions and Equations** | **Percentages & Ratios, Rates and scale drawing** | **Coordinate Geometry** | **Geometry** | **Probability & Statistics** |
| **Duration (weeks of instruction)** | 8 weeks | 7 weeks | 8 Weeks | 7 Weeks | 6 weeks |
| **Key Concept** | Relationships | Logic | Form | Forms | Relationships |
| **Related Concepts** | Pattern, Relationship and Simplifications | Equivalence and quantity | Pattern and Representation | Pattern and Space | Patterns and relationship |
| **Global Context** | Personal and cultural expressions | Scientific and technical innovation | identities and relationships | Personal and cultural expression | Scientific and technical Innovations |
| **Statement of Inquiry** | Cultures express themselves through pattern design. | A logical process helps us simplify quantities for better understanding and make informed decisions on problems solving. | Identifying and understanding patterns and relationships helps us to gain clear insight into the world. | Mathematical patterns and forms create measurable space used in architecture and other modes of personal expression. | Creating models through measurements in the natural world can help in understanding relationships. |
| **MYP Subject Objectives** | A,C,D | A, B, C, D | A, B | A, C and D | A,C,D |
| **Approaches to Learning skills (ATLs)** | Collaborative Skills | Organisation Skills | Communication Skills | Communication Skills | Research Skills |
| **Content** | Patterns in Algebra. Algebraic Expressions and Equations with four operation systems. | Fractions, decimals, percentages, ratios and rates and scale drawings. | Coordinates and the number plane. Straight line graphs and lines parallel to the axes. Finding the slope and the y intercepts. | Reasoning in parallel lines and transversal. 90, 180 and 360 degree angles, angle sum of triangle and quadrilateral. Area and circumference of circle, perimeter. Perimeter and area of square, rectangle, triangle, rhombus, kite, parallelogram and trapezium, volume of prisms. | Probability: experimental probability vs theoretical probability, fractions, tree diagrams<br>Statistics: data collection, histogram, stem-and-leaf plot, categorical vs numerical data, sample vs census, biased, mean, median, mode |
| **Summative Assessment Task(s)** | Unit Test(A) Investigation On Algebra(C, D) | Investigations(C,D):Which is the Better Buy? Investigation(B): Find decimal and fraction pattern : Proportions Unit Test (A) | Unit Test (A) Investigation (B): Formative and Summative Straight Line Graph | Unit Test (A) Investigation (C,D) Find the area in a house. | Unit test (A) Investigation:Cheerios (C,D) |
| **Common Core standards** | 7.EE.A.1&A.2 Use properties of operations to generate equivalent expressions. 7.EE.B.3 Solve real-life and mathematical problems using numerical and algebraic expressions | 7.RP.A.2 Analyze proportional relationships and use them to solve real-world and mathematical problems. | 8.EE.B.5 Understand the connections between proportional relationships, lines, and linear equations. | 6.G.A.1,2 Solve real-world and mathematical problems involving area, surface area, and volume. | 7.SP.A.1 Use random sampling to draw inferences about a population. |

Please note: The curriculum is subject to change based on student learning needs and interests.

Common Core Standards: http://www.corestandards.org/Math/

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Date updated: 16 September 2018