**Mathematics Grade 8 - Elementary Curriculum**

Aim

1. problem solving
2. reasoning and proving
3. Reflecting
4. Connecting
5. Communicating
6. Representing

Topics involved:

1. Number sense
2. Use whole numbers or decimal numbers
3. Simple math Operations
4. Patterns and Relationships
5. Solving an equations in terms of x

Goal

1. To get the skills needed for financial needs
2. To know the basic probability of an event (0,1)
3. To represent objects using shapes and geometric properties
4. To be able to measure in various contexts.

Note:

The Grade 9 and 10 mathematics program builds on the elementary program Grade 8.

So the player cannot access further levels if he does not complete the ENTIRE “Grade 8” level.

**Mathematics Grade 9 - Secondary Curriculum**

Aim

1. Mathematical Thinking and Making Connections apply to all areas of course content
2. developing critical and creative mathematical thinking.

Topics

1. Number set
2. Powers,ratios,percentages
3. Proportions
4. Representation of data
5. Expressing data as algebra expressions
6. Geometric and Linear relationship
7. Understanding data involving one or 2 variables

Goal

1. To ensure students understand the fundamentals from grade 8
2. To help the student develop its own mathematical sense
3. To make use of creative-thinking skills when developing solutions and approaches
4. Develop problem-solving strategies

Note: Grade 9 and Grade 10 have many common concepts but

Grade 10 is more difficult in terms of complexity and abstraction level

**Mathematics Grade 10 - Secondary Curriculum**

Aim:

1. To extend the knowledge using more abstract examples
2. Learn the techniques involved in graphing
3. Learn and apply linear systems
4. Learn and apply the Principles of Trigonometry

Topics:

1. Investigate and solve Quadratic Relations
2. Solve problems involving Linear Algebra
3. Solve problems involving Geometric Properties
4. Graphing of Algebra equations
5. Identify and Interpret Quadratic Relations

Goals:

1. Expose students to new math syntax
2. Students are able to answer open-ended questions related to daily tasks
3. Model new ways in which various kinds of questions can be answered
4. Make connections within and between various context with considerable effectiveness

**References**

1. [**http://www.edu.gov.on.ca/eng/curriculum/secondary/math910curr.pdf**](http://www.edu.gov.on.ca/eng/curriculum/secondary/math910curr.pdf)
2. **https://www.dcp.edu.gov.on.ca/en/curriculum/elementary-mathematics/grades/g8-math/strands**