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Toll Free:	1-888-479-8882		
Course:	Mathematics 8	**Course Length:**	10 months (approx. 120 hours)
Teacher:	Ms. Elixa Neumann		
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Course Outline: Mathematics 8

Course Description

The curriculum for this course is organized around these Big Ideas:				
Number represents, describes, and compares the quantities of ratios, rates, and percents.	Computational fluency and flexibility extend to operations with fractions.	Discrete linear relationships can be represented in many connected ways and used to identify and make generalizations.	The relationship between surface area and volume of 3D objects can be used to describe, measure, and compare spatial relationships.	Analyzing data by determining averages is one way to make sense of large data sets and enables us to compare and interpret.

Students are expected to know the following:

- perfect squares and cubes
- square and cube roots
- percents less than 1 and greater than 100 (decimal and fractional percents)
- numerical proportional reasoning (rates, ratio, proportions, and percent)
- operations with fractions (addition, subtraction, multiplication, division, and order of operations)
- discrete linear relations (extended to larger numbers, limited to integers)
- expressions- writing and evaluating using substitution
- two-step equations with integer coefficients, constants, and solutions
- surface area and volume of regular solids, including triangular and other right prisms and cylinders
- Pythagorean theorem
- construction, views, and nets of 3D objects
- central tendency
- theoretical probability with two independent events
- financial literacy — best buys

Course Layout

Each unit features two quizzes, a Learning Guide, an Inquiry Project, and a Unit Test. This course is broken down as follows:

Unit	Topic
Preliminary Assignments	Course Outline About Me
1	Numeracy
2	Exponents
3	Equations
4	Percent and Ratios
5	Graphing & Tables
6	Geometry
7	Data Analysis
8	Finances
Course Completion	Core Competency Reflection

Activation

To finalize registration in the course, students need to complete the Learning Guide and Inquiry Project for Unit 1 within 30 days of registration. Students may be removed from the course if this has not been completed in time.

Assessment

Each assignment, including the Learning Guide and the Inquiry Projects, will be marked on the proficiency scale. There is a rubric attached to each assignment.

Tests will be marked using a percentage.

Percentage	Proficiency Scale
86%+	Extending
73% - 85%	Proficient
60% - 72%	Developing
50% - 59%	Emerging
<50%	Additional Support Required and Retest

At the end of the year, students will receive a Proficiency Assessment for the course. There are no percentages or letter grades given in this course.

Proficiency	Explanation
Extending	Student has demonstrated a sophisticated understanding of the concept and competency and/or broadened learning beyond the expectations of this outcome. The work is detailed and tidy and demonstrates an exceptional understanding of the learning outcomes.
Proficient	Student has a complete understanding of the concept and competency. The work is tidy and demonstrates the strategies used to solve the problems.
Developing	Student has demonstrated a partial understanding of the concept and competencies.
Emerging	Student has demonstrated an initial understanding of the concept and competency and require additional support to demonstrate understanding.

Learning Guides and Inquiry Projects

These are the primary assignment for each unit. Students will download the Learning Guide at the start of each unit and complete it as they go through the unit. Students are expected to keep their work neat and organized, communicate their ideas as well as they can, and not skip any questions.

Before writing a unit exam, students must submit all assignments leading up to the exam. Students should be reviewing feedback from the teacher for the Learning Guide before taking the unit test.

Exam Supervision

Students may complete quizzes independently.

All exams are "closed book" and require supervision from a parent, guardian, or teacher. No additional notes or resources are to be used while taking the test.

Course Activity

Students must be working to complete learning engagements on a regular basis. Students who are inactive after two weeks will receive an email to their Brightspace email program providing a warning of inactivity. Students who are inactive after 1 month may be withdrawn from the course. If a student is planning to be inactive due to personal reasons, they need to contact their teacher to inform them of the period of inactivity.

Students should aim to complete a minimum of one unit per month to finish the course within a 10-month period.

Contacting the Teacher

Students are expected to contact the teacher when help is needed or questions arise. The best way to communicate with the teacher is through the Brightspace Email program. Students should be checking their Brightspace email program at least once a week.

Parents and Guardians can email the teacher at Elixa.Neumann@burnabyschools.ca

Resources

There are NO textbooks required for this course. Students need a basic scientific calculator.

Plagiarism

Plagiarism is unacceptable under any circumstance. Students are expected to create authentic work which demonstrates their own understanding. If students are caught cheating, plagiarizing, or submitting AI-generated responses within this course, they may be removed from the course. All sources must be cited.