Math 9<br>Course Outline<br>2013-2014

## Textbook

Math Makes Sense 9
The student is responsible for returning the textbook in the same condition that it was issued and will be charged a replacement fee if the textbook is damaged or lost.

Supplies
Binder with dividers
Lined and Graph Paper
Pencil, pen, eraser, ruler
Scientific Calculator

Unit Tests<br>Quizzes



Assignments/Projects
Final District Exam

Students are expected to complete all assigned work on a timely basis. If a student fails to complete any assignments, he/she will be given an Incomplete grade for the course until all missing assignments have been completed.

## Chapter 1 Square Roots and Surface Area

- Square Roots of Perfect Squares
- Square Roots of Non-perfect Squares
- Surface Areas of Objects made from Right Rectangular Prisms
- Surface Area of Other Composite Objects


## Chapter 2 Powers and Exponent Laws

- What is a Power?
- Powers of Ten and the Zero Exponent
- Order of Operations with Powers
- Exponent Laws I
- Exponent Laws II


## Chapter 3 Rational Numbers

- What is a Rational Number?
- Adding and Subtracting Rational Numbers
- Multiplying and Dividing Rational Numbers
- Order of Operations with Rational Numbers


## Chapter 4 Linear Relations

- Writing Equations to Describe Patterns
- Linear Relations
- Another Form of the Equation for a Linear Relation
- Matching Equations and Graphs
- Using Graphs to Estimate Values


## Chapter 5 Polynomials

- Modelling Polynomials
- Like Terms and Unlike Terms
- Adding and Subtracting Polynomials
- Multiplying and Dividing a Polynomial with a Constant
- Multiplying and Dividing a Polynomial with a Monomial


## Chapter 6 Linear Equations and Inequalities

- Solving Equations Using Inverse Operations
- Solving Equations Using Balance Strategies
- Introduction to Linear Inequalities
- Solving Linear Inequalities Using Addition and Subtraction
- Solving Linear Inequalities Using Multiplication and Division


## Chapter 7 Similarity and Transformations

- Scale Diagrams and Enlargements
- Scale Diagrams and Reductions
- Similar Polygons
- Similar Triangles
- Reflections and Line Symmetry
- Rotations and Rotational Symmetry
- Identifying Types of Symmetry


## Chapter 8 Circle Geometry

- Properties of Tangents to a Circle
- Properties of Chords in a Circle
- Properties of Angles in a Circle


## Chapter 9 Probability and Statistics

- Probability in Society
- Potential Problems with Collecting Data
- Using Samples and Populations to Collect Data
- Selecting a Sample
- Designing a Project Plan

