Course Outline – Grade 8 Math

***Name of Teacher: Mr. MacKinnon***

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***Room Number: 156***

***Brief Description of Course:***

The goals of math within the middle school setting are to enable students to solve problems, allow them to grow to deal with new or different situations, use mathematical tools in life skills and develop a positive attitude towards mathematics and lifelong learning.

**Topics Covered Include:**

- Integers

- Operations with Fractions

- Square roots and the Pythagorean Theorem

- Measuring Prisms and Cylinders

- Percent, Ratios and Rates

- Linear Equations and Graphing

- Data Analysis and Probability

- Geometry

**Classroom Expectations:**

- Students are each given a copy of their math textbook, which they are responsible for throughout the school year. Each textbook must be paid for/replaced if lost or not returned to the library at the end of the year.

- All assignments and projects must be completed for assessment.

- All students should come to class prepared. They should have a pencil and a

notebook to keep all of their math work in one place.

-Extra help will be offered by the teacher. Students will be encouraged to come for extra help if they need more assistance with a particular topic.

- Homework given is for the benefit of the student. They will only become better with practice. All students will be expected to attempt the homework questions when homework is given.

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| **Unit/Time Frame** | **Topics** |
| Unit 2 - September | Multiplying Integers  Dividing Integers  Order of Operations |
| Unit 3 - October | Multiplying Fractions  Dividing Fractions  Solving Problems with Fractions  Order of Operations with Fractions |
| Unit 1 - November | Squares and Square Roots  Pythagorean Theorem |
| Unit 4 – December/January | Nets  Surface Area of 3-D shapes  Volume |
| Unit 5 - February | Percents  Sales Tax and Discount  Ratios  Rates |
| Unit 6 – March/April | Solving Equations  The Distributive Property  Graphing Linear Relations |
| Unit 7 – April/May | Graphs  Probability |
| Unit 8 – May/June | Views of Objects (Drawing and Building)  Transformations |

**EVALUATION CRITERIA \_\_\_\_\_\_\_\_\_**

**Grade Outcome Represents Final Understanding of Course Material**

**Students Demonstrate Understanding of Curricular Outcomes**

**SUMMATIVE**

**FORMATIVE**

In-Class Activities, Practice, Homework, Small Assignments, Group Work, Check-Ups, etc.

Quizzes, Tests, Major Projects, Unit Exams, Final Exam

* **Formative** work is mandatory. All **formative** work must be completed in order for students to be successful on **summative** assessments. Failure to complete **formative** work will result in any combination of the following:
  + **mandatory after school or lunch extra-help tutorial**
  + **ineligibility to participate in summative assessment rewrites**
  + **on-campus reassignment**
* **Summative** tasks are mandatory. All summative tasks must be completed to accurately assess a

student’s understanding and abilities of course goals and outcomes. If a student fails to complete a summative assignment, he or she will be required to find time before or after school to complete the assigned tasks. Parent contact will be made should the student fall short of the agreed upon plan. If the assigned task continues to be outstanding on the third day, the student will be placed in on-campus reassignment until the work is complete:

* + **mandatory after school or lunch extra-help tutorial**
  + **on-campus reassignment**
  + **parent/teacher/student/administrator meeting**
  + **student performance contract**

**ASSESSMENT OF STUDENT PERFORMANCE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Quizzes and Assignments 25%

Show What You Know (Performance Assessments) 25%

Unit Tests 30%

Mid-Year Assessment 8%

Final Assessment 12%

**BASIC STUDENT RESOURCES\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Math Makes Sense 8 Textbook (Provided)

Math Makes Sense 8 Practice and Homework Book (Provided)