GRADE 8 MATHEMATICS: PROGRAM OVERVIEW

The Grade 8 Mathematics curriculum is divided into four streams:

- *Number Sense* (fractions, integers, decimal numbers, square roots, percent)
- Shape and Space (Pythagorean Theorem, area, volume, geometric shapes)
- Patterns and Relations (Algebraic equations, graphs, pattern prediction)
- Statistics and Probability (data representation and bias, probability of independent events)

Emphasis is based both on real world problem solving activities, and concrete understanding. Students will be provided with a variety of math related activities including problem-solving, group collaboration, using manipulatives and hands-on math learning. All math units are organized to build as students strengthen their understanding and skills, from beginning to intermediate to advanced outcomes.

Expectations:

- Regular attendance.
- Active participation, attempting questions at their level as they work through a unit.
- Completing assignments, reflecting on feedback, and working on corrections to improve skills.
- Teacher feedback is provided to strengthen skills and understanding.
- As students master outcomes, they move to the next level in the unit.
- Collaboration and respect for all during group work.

Assessment:

- Assessment methods are outcome based. An outcome is a skill or application of a skill or concept in a unit.
- Students are provided with frequent opportunities to demonstrate mastery of unit outcomes.
- Students are assessed on their best, most recent work in a unit.
- All math units are organized for students to build their understanding, step by step, from beginning outcomes to intermediate to advanced outcomes.
- Assessment for learning with teacher feedback: students can examine their work as they move through a unit, making corrections to improve.
- Students are provided with frequent opportunities to demonstrate mastery of unit outcomes.
- Students can practice and demonstrate learning through problem-solving activities, solving puzzles, mental math, exit slips, math journals, assignments, projects, quizzes and tests.

 Self assessment throughout a unit will also inform students of their own progress.

Keys to success: Regular attendance, active participation, and both completion and reflection on assignments and activities.

Advanced students will be provided with enrichment opportunities and math challenges.

In accordance with the province-wide report card template, student progress reports will include specific reference to three assessment categories: *Knowledge and Understanding*, *Mental Math / Estimation*, and *Problem Solving*.

Grade 8 Math Teachers:

Ms. Leonard - <u>aleonard@wsd1.org</u>

Mr. Opochinsky - <u>aopochinsky@wsd1.org</u>

Mr. Reimer - <u>shreimer@wsd1.org</u>

(GRADE 9 NEXT PAGE)