Grade 8 Math

At the Grade 8 level, students use seven critical processes to build their understanding of math and support lifelong learning:

- **Communication** showing learning orally, through diagrams, and in writing.
- Connections making connections to everyday situations, other subject areas, and mathematics concepts.
- **Estimation/Mental Mathematics** developing understanding of numbers and quantities.
- **Problem Solving** investigating problems, including those with multiple solutions.
- > Reasoning justifying thinking.
- > **Technology** using technology to enhance problem solving and encourage discovery of number patterns.
- > Visualization drawing on mental images to clarify concepts.

Below are the 4 strands of the curriculum your child will be working in and the main topics that will be covered.

> <u>Number</u>

- o Demonstrates number sense for perfect squares, square roots, percents, rate and ratio, fractions, integers, and rational numbers.
- Shows understanding of the multiplication and division of fractions and integers in a variety of ways.
- o Uses number sense to solve problems using a variety of strategies.

Patterns and Relations

o Models, solves, graphs, and understands the meaning of equations.

> Shape and Space

- Solves problems involving surface area, volume, and the Pythagorean theorem.
- o Draws and interprets nets and views of 3-D objects.
- o Creates, identifies, and explains the properties of tessellation.

Statistics and Probability

- Analyses advantages and disadvantages of data presented in a variety of ways.
- o Solves problems involving the probability of independent events.