## 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.

## $>$ Number

- 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.
- Uses number sense to solve problems using a variety of strategies.


## Patterns and Relations

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


## - Shape and Space

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


## > Statistics and Probability

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

