**Grade 9 Mathematics Targets**

The following outcomes are essential knowledge moving forward in high school mathematics. They will be tracked and re-assessed as the year progresses. They are listed in the order they will be studied.

G-1 Students will be able to use properties of circles to solve problems. (SS-1)

A-1 Students will be able to order and compare rational numbers. (N-3)

**A-2 Students will be able to add, subtract, multiply and divide rational numbers. (N-3)**

B-1 Students will be able to explain what exponents are and what they represent. (N-1)

B-2 Students will be able to use the power laws to simplify expressions with exponents. (N-2)

B-3 Students will be able to use order of operations (BEDMAS). (N-4)

C-1 Students will be able to recognize and model a polynomial expression and identify its parts. (PR-5)

**C-2 Students will be able to add and subtract polynomials. (PR-6)**

C-3 Students will be able to multiply and divide polynomials. (PR-7)

**D-1 Students will be able to solve for x in an equation. (PR-3)**

D-2 Students will be able to solve for x in an inequality. (PR-4)

E-1 Students will be able to write an equation from a pattern. (PR-1)

E-2 Students will be able to graph and analyze linear equations. (PR-2)

**F-3 Students will be able to find the surface area of 3-D objects. (SS-2)**

F-1 Students will be able to determine the square root of perfect squares. (N-5)

F-2 Students will be able to estimate the square root of non-perfect squares. (N-6)

The following targets will be studied as time allows.

H-1 Students will be able to use similar polygons to determine unknown measurements. (SS-3)

H-2 Students will be able to draw and interpret scale diagrams of 2-D shapes. (SS-4)

H-3 Students will be able to identify and describe symmetry in 2-D shapes. (SS-5)

I-1 Students will be able to explain how probability is used in society. (SP-4)

I-2 Students will be able to describe the factors that affect the collection of valid data. (SP-1)

I-3 Students will be able to decide when to use a sample or census. (SP-2)

I-4 Students will be able to plan, collect and display valid statistics. (SP-3)