**8th grade Advanced Algebra Concepts**

The purpose of this class is to better prepare 8th grade math students for the transition into upper level high school math concepts. Basic math concepts will be covered and reinforced to help prepare students to work without a calculator better. Pre-Algebra and Algebra concepts will be covered in more detail so as to help in the development and understanding of these concepts as students move into upper level math classes at the high school. The majority of this class is to reinforce skills necessary for students to transition successfully into geometry and beyond at the high school level.

Concepts covered:

Basic math skills with decimals, fractions, and negatives

Ratios and proportions

Solving basic algebraic equations

Properties prevalent to algebra

Exponent properties

Using formulas

Understanding polynomials and operations on them

Linear functions

Quadratic functions

Factoring