Grade 5 Math Unit: Geometry and Trigonometry

Unit Description:
In this unit students will learn the basic concepts of Geometry, from identifying and comparing solid and plane figures to calculating and utilize our skills in area, perimeter and volume of with figures. Students will be engaged with a variety of hands-on activities to enhance the learning experience.

Central Idea:
Geometry shapes our life.

Essential Question:
How does Geometry affect the use of math in our daily life?

Course Topics and Objectives:
- Lines, Rays and Angles
    - Students will examine properties of lines and angles in order to characterize plane figures.
    - Students will use a protractor to measure angles.
- Congruence and Similarity
    - Students will evaluate several figures and determine if the set of shapes is congruent.
- Symmetry
    - Students will analyze properties of plane figures in order to locate line of symmetry.
- Triangles
    - Students will analyze geometric relationships in order to compare triangles by sides and angles.
- Quadrilaterals
    - Students will analyze geometric relationships in order to compare and classify quadrilaterals.
- Tessellations
    - Students will analyze properties of plane figures in order to identify figures within composite shapes
- Solids
    - Students will analyze properties of solid geometric figures in order to classify pyramids and prism by their faces, edges, and vertices.
    - Students will analyze properties of solid geometric figures in order to identify solids in real life situations.
    - Students will compare solid and plane figures by their properties.
- Transformations
    - Students will examine the representation of geometric figures in order to describe transformations of figures.
    - Students will analyze and create scale models of different geometric figures.

Assessment:
Along with daily work and in classroom observation, students will complete Mathletics Assessments and an in-class final, summative assessment.