

# Grade 5 Mathematics

## First Trimester

September 8 – November 4

(Check out our Math Parent Resources at

<http://www.tufsd.org/wi/mathresources/grade5.html> )

September: Mathematics in Our World

### **Essential Questions:**

**How is math used in the real world?**

**Do I understand the place value structure of the base ten system?**

### **Skills:**

**Estimate whole number computations and judge the reasonableness of results.**

**Understand the need for measuring with standard units.**

**Demonstrate understanding of the place value structure of the base ten system.**

**Compute with whole numbers and judge the reasonableness of answers.**

**Read and interpret information presented in graphs or charts.**

**Make predictions based on data.**

**Convert among standard units of time.**

**Add times expressed in minutes and seconds.**

**Identify and use relationships between operations.**

**Use addition, subtraction, multiplication, and/or division to solve problems.**

Properties of Polygons and Circles

### **Essential Questions:**

**What are the attributes of a circle?**

**Why is estimating important before measuring exact angles?**

**Skills:**

Identify attributes of circles.

Measure angles using a protractor.

Use a right angle as a benchmark for estimating size of angles.

Determine the sum of the measures of the angles of polygons and the measure of each angle in regular polygons.

Know that the sum of the central angles of polygons is  $360^\circ$ .

Classify, identify, and name triangles according to their properties.

Identify and construct shapes that are congruent and shapes that are similar.

October: Using Multiplication

**Essential Questions:**

How does the order in which operations are solved affect the answer in an equation?

Why is estimating the product an important step in multiplying large numbers?

**Skills:**

Create number sentences for problem situations.

Demonstrate two different ways to solve the same problem.

Apply the rules for order of operations to solve problems.

Understand the four types of multiplication problems.

Develop and use strategies to estimate whole number products and judge the reasonableness of results.

Select appropriate methods and tools for computing whole number products according to the context and nature of the computation.

Develop proportional reasoning.

Describe, extend, and make generalizations about geometric or numeric patterns.

Represent or analyze patterns and functions using words, tables, or pictures.

## Using Division

### **Essential Questions:**

How does applying the inverse relationships of multiplication and division help identify products and quotients?

How can I estimate quotients?

How does the order of a set of data affect the range and mean?

### **Skills:**

Use inverse relationships of multiplication and division to identify factors of a number.

Identify common factors and greatest common factor of pairs of number.

Divide three digits by a 1 digit divisor.

Explain the meaning of the remainder in a division problem.

Identify the range and the mean for a set of data.

Make predictions about data.

Multiply and divide by a multiple of 10.

Develop and use strategies to estimate quotients.

Describe important features of data with emphasis on how data are distributed.

Estimate the results of whole number computation.