

*Mrs. Benavides*  
*5<sup>th</sup> Grade Mathematics Syllabus*  
*2011 - 2012 School Year*

**1<sup>st</sup> Nine Weeks**

Chapter 1: Place Value, Addition, and Subtraction

In this chapter, students will be able to:

- Explore the billions place value.
- Read, write, compare, order, and round numbers.
- Use addition properties and subtraction rules.
- Use rounding and front-end estimation.
- Read and write Roman Numerals.

Chapter 2: Multiplication

In this chapter, students will be able to:

- Use properties, special factors, and patterns.
- Estimate and multiply up to 3-digit numbers and money.
- Solve problems with hidden information by using more than one step.

Chapter 3: Division

In this chapter, students will be able to:

- Use the meaning of division and patterns.
- Explore divisibility rules and short division.
- Estimate using compatible numbers.
- Learn about the order of operations.
- Make a table and find a pattern to solve problems.

**2<sup>nd</sup> Nine Weeks**

Chapter 4: Number Theory and Fractions

In this chapter, students will be able to:

- Explore factors, primes, composites, and multiples.
- Rename equivalent fractions, improper fractions, and mixed numbers.
- Find whether a fraction is closer to 0,  $\frac{1}{2}$ , or 1.
- Compare and order fractions.
- Solve problems using organized lists.

Chapter 5: Fractions: Addition and Subtraction

In this chapter, students will be able to:

- Learn to add or subtract with renaming.
- Estimate sums and differences of mixed numbers.
- Use the “Work Backward” strategy.

Chapter 6: Fractions: Multiplication and Division

In this chapter, students will be able to:

- Multiply fractions and mixed numbers using the GCF (Greatest Common Factor)
- Explore division with models
- Learn about reciprocals and dividing fractions and mixed numbers
- Estimate mixed-number products and quotients
- Solve problems using simpler numbers

### **3<sup>rd</sup> Nine Weeks**

#### Chapter 7: Probability and Statistics

In this chapter, students will be able to:

- Learn about tree diagrams and independent and dependent events.
- Collect, organize, report, and interpret data.
- Interpret and make line plots, histograms, and line graphs.
- Use a model or diagram to solve problems.

#### Chapter 8: Decimals: Addition and Subtraction

In this chapter, students will be able to:

- Estimate, add, and subtract decimals.
- Solve problems with extra information by using more than one step.

#### Chapter 9: Decimals: Multiplication and Division

In this chapter, students will be able to:

- Multiply and divide by powers of ten.
- Estimate decimal products and quotients.
- Multiply and divide decimals and money.
- Write a number sentence to solve problems.

### **4<sup>th</sup> Nine Weeks**

#### Chapter 10: Geometry

In this chapter, students will be able to:

- Classify angles and polygons.
- Explore congruence, similarity, symmetry, transformations, and tessellations
- Use perimeter and circumference formulas
- Solve problems using formulas

#### Chapter 11: Measurement Topics

In this chapter, students will be able to:

- Investigate customary units of length, capacity, and weight.
- Read Fahrenheit and Celsius temperature scales.
- Learn about time zones.
- Compute customary units with regrouping.
- Solve problems by using more than one step.

#### Chapter 12: Metric Measurement, Area, and Volume

In this chapter, students will be able to:

- Investigate metric units of length, capacity, and mass.
- Use Area formulas.
- Classify solid figures.
- Learn about cubic measure and volume.
- Solve problems by drawing a picture.

#### Chapter 13: Ratios, Proportions, and Percents

In this chapter, students will be able to:

- Relate ratios to fractions.
- Use proportion in scale drawings and maps.
- Relate fractions and decimals to percents.
- Find the percent of a number.
- Solve problems by combining strategies.