**A. Dorothy Hains Elementary School**

**1820 Windsor Spring Road**

**Augusta, Ga 30906**

**Ms. S. Weaver 5th Grade Mathematics Syllabus**

**Fifth Grade Course Description**

**Mathematics Teacher**: Ms. S. Weaver          weavesh1@boe.richmond.k12.ga.us

**Planning Time**: Monday, Tuesday, Wednesday, Thursday, and Friday, 9:40-10:20

**Course Description Math:**

Math allows students to build on their basic math skills while pushing them towards higher order and critical thinking.  Units such as multiplying and dividing decimals, graphing data and statistics, working algebraic expressions, and finding the perimeter, area, and volume of different shapes supplement daily skills such as place value, addition, subtraction, multiplication, and division.  Throughout the school year, fifth-grade students become more in tune with their number sense and mathematical confidence.

**Lessons are organized into several chapters that introduce and cover:**

1. **Whole Numbers** – Students learn how to apply concepts of place value and estimation using Arabic and Roman numerals.
2. **Operations with whole numbers** – Students develop an understanding of operations using addition and subtraction of whole numbers, multiplication using 3 by 2, and division with 2-digit divisors and 3-digit dividends. Students are asked to solve problems using exponents and order of operations. They will also identify prime numbers through factorization and apply problem-solving strategies to real-life situations.
3. **Decimals** – Students apply their knowledge of adding and subtracting using decimals. They are asked to read and write numbers to the thousandth place, use decimals in conjunction with the number line, and add and subtract decimals with estimating sums and differences.
4. **Fractions** – Students develop their ability to add and subtract using fractions and mixed numbers through the use of interactive lessons. Exercises help students to apply this knowledge to multiplying and dividing fractions, making equivalent fractions, working with mixed numbers, estimating fractions, and developing relationships between fractions, decimals, and precents.
5. **Algebra** – Students identify the connection between algebraic patterns, equations, and addition, subtraction, multiplication, and division through direct instruction, activities, and worksheets involving integer patterns, algebraic patterns, and equations.
6. **Measurement** – Teaches units of measurement and conversions. Students are asked to apply formulas to customary and metric length, weight, capacity, and temperature measures. Finally, students will learn formulas and apply them to calculate area, perimeter, and volume measures.
7. **Geometry** – Students will discover various geometric concepts that apply to real situations. Students will explore geometric terms and learn their proper application, learn about three-dimensional figures, learn and use surface net and scale drawing to build their own figures, determine the measurement of angles, graph using ordered pairs, and use symmetry and transformation to identify shapes.
8. **Probability** – Teaches the concept of probability. Students are asked to predict outcomes by using methods of probability and applying this to simulated situations.
9. **Data Analysis** – Students are taught the many kinds of graphs, such as bar graphs, line graphs, histograms, Venn diagrams, and pictographs. Students are asked to organize data by using basic statistics and terms such as mean, median, mode, and range. They are also taught the purpose and use of the stem and leaf plot.
10. **Practice** – Students will apply previous knowledge through interactive lessons on reading and writing numbers, expanded form, Roman numerals, rounding off, exponents, most significant common factor, prime factorization, algebraic properties, mental computation, estimation, complex division, comparing fractions, performing operations with mixed numbers and fractions, decimals and the number line, percent’s, a fundamental review of geometry, ratios and proportions, measurement, and problem-solving. This chapter consists of a comprehensive cumulative review of the course.

**Instructional Philosophy:**I believe every child has a right to a high-quality education to compete in today's society.

**Major Course Project & Instructional Activities**: Students can demonstrate a working knowledge of the math standards and create a math booklet for reference. Finally, students will gain the knowledge needed to score proficient or higher on the Georgia Milestones Test for 5th Grade.

**Course Assessment Plan**: A rubric will be utilized during the school year to grade students’ projects and assessments. Students will be given tests weekly or biweekly to measure understanding and monitor growth. Tests are usually scheduled on Thursdays or Fridays.

**Grades will be assigned as follows**:

Tests - 25%

Projects – 25%

Quizzes – 20%

Journal – 20%

Homework – 10%

**The Richmond County Grading Scale is as follows**:

A – 100 - 90

B – 80 – 89

C – 75 – 79

D – 70 – 74

F – Below 70

**Classroom Expectations**: Students must come to class prepared daily with paper, pencils, student agenda, and homework assignments. Students are expected to attend class on time, orderly, and prepared to begin their daily assignments.

**Homework Policy and Grading Scale**: Homework is due the day after it is assigned. Due dates are subject to change, and students will be notified of the changes.  Any student who misses an assignment due to illness or an absence will be responsible for completing the assignment upon return to school.

I look forward to working with you to have a wonderful school year!!!