SPRING GROVE AREA SCHOOL DISTRICT

PLANNED COURSE OVERVIEW

Course Title: Mathematics	**Length of Course:** 30 Cycles
Grade Level(s): 1	**Periods Per Cycle:** 6
Units of Credit: N/A	**Length of Period:** 60 Minutes
Classification: Required	**Total Instructional Time:** 180 Hours

Course Description

This course is designed to present developmentally appropriate basic number facts and computation skills. It covers a variety of fundamental mathematical skills that include: Numbers and Operations, Algebraic Concepts, Geometry, Measurement, Data and Probability.

Instructional Strategies, Learning Practices, Activities, and Experiences

- Anchor Charts
- Anticipatory Sets
- Assessments (Chapter, Unit, Teacher-Created)
- Bell Ringers
- Calculators
- Class Discussions
- Closure
- Critical Thinking
- Fact Fluency
- Flexible Groups
- Graphic Organizers
- Guided Practice
- Higher-Level Questioning
- Homework
- Interaction Sequence
- Journals
- Manipulatives
- Posted Objectives
- Practice Exercises
- Presentations
- Projects
- Small Group Interventions
- Teacher Demonstrations
- Teacher Observations
- Technology Integration
- Internet Resources
- Vocabulary (Cards, Strategies, and Lists)
- Wait Time
- Wait Time Extended

Assessments

- Assessments (Chapter, Unit, Teacher-Created)
- Closure
- Fact Fluency
- Higher-Level Questioning
- CASE Assessments
- Presentations
- Projects
- Teacher Observations

Materials/Resources

- Anchor Charts
- Calculators
- Graphic Organizers
- Houghton Mifflin 2007
- Internet Resources
- Manipulatives
- Journals
- Resource Books
- Trade Books, Picture Books, Big Books
- Math in Practice
- Vocabulary (Cards, Strategies, and Lists)

Adopted: 1/27/88
Revised: 9/3/91; 9/16/98; 9/17/03; 8/17/09; 5/20/13; 5/20/2019

Unit 1: Numbers and Operations – Base Ten	
The Standards of Mathematical Practices	
Make sense of problems and persevere in solving them. **Construct viable arguments and critique the reasoning of others.** **Use appropriate tools strategically.** **Look for and make use of structure.**	**Reason abstractly and quantitatively.** **Model with mathematics.** **Attend to precision.** **Look for and express regularity in repeated reasoning.**
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
2.1 Numbers and Operations in Base 10 • Count to 120, starting at any number, and read and write numerals • Understand the meaning of tens and ones in a two-digit number • Decompose two-digit numbers • Compare two-digit numbers using symbols • Mentally find ten more or ten less than a two-digit number • Use place value models, drawings, or strategies to add a two-digit number and a multiple of 10, and to subtract a multiple of 10 from a multiple of 10 • Solve word problems using these skills	**2.1.1.B.1** - Extend the counting sequence to read and write numerals to represent objects within 120. **2.1.1.B.2** - Use place value concepts to represent amount of tens and ones and to compare two-digit numbers. **2.1.1.B.3** - Use place value concepts and properties of operations to add and subtract within 100. **Habits of Mind of a Production Mathematical Thinker:** • Reasoning and Explaining • Modeling and Using Tools • Seeing Structure and Generalizing

Unit 2: Operations and Algebraic Thinking	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
2.2 Operations and Algebraic Thinking • Explore strategies for addition and subtraction within 20 • Gain fluency with addition and subtraction facts within 20 • Use place value models, drawings, or strategies to add a two-digit number and a one-digit number • Solve word problems using addition and subtraction strategies	**2.2.1.A.1** - Represent and solve problems involving addition and subtraction within 20. **2.2.1.A.2** - Understand and apply properties of operations and the relationship between addition and subtraction. **CC.2.1.2.B.3** - Use pace value understanding and properties of operations to add and subtract within 1,000. **CC.2.2.2.A.1** - Represent and solve problems involving addition and subtraction within 100. **Habits of Mind of a Production Mathematical Thinker:** • Reasoning and Explaining • Modeling and Using Tools • Seeing Structure and Generalizing

Unit 3: Geometry	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
2.3 Geometry • Recognize the defining attributes of flat and solid shapes • Describe and draw shapes based on their attributes • Compose and decompose shapes • Partition shapes in halves and fourths in different ways • Describe a whole by talking about its parts using words like halves, fourths and quarters • Understand that when decomposing a whole into equal parts, the parts get smaller • Understand that fractions can show parts of a set • Solve word problems using the above skills	**2.3.1.A.1** - Compose and distinguish between two- and three-dimensional shapes based on their attributes. **2.3.1.A.2** - Use the understanding of fractions to partition shapes into halves and fourths. **Habits of Mind of a Production Mathematical Thinker:** • Reasoning and Explaining • Modeling and Using Tools • Seeing Structure and Generalizing

Unit 4: Measurement and Data	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
2.4 Measurement and Data • Recognize and know the value of coins • Count set of LIKE coins (pennies, nickels, dimes) • Understand the clock face • Tell time to the hour and half hour • Connect analog and digital displays • Understand elapsed time • Compare and order three objects by length; Compare the length of two objects based on the length of a third object • Measure length by lining up objects end to end; Understand that the measurement of an object differs when different sized units are lined up • Measure objects using inches and centimeters with a ruler • Organize and represent up to three categories of data	**B: Optional Enrichment** - Explorations with coins at the first grade level provide a foundation for those problem solving experiences in second grade. **2.4.1.A.2** - Tell and write time to the nearest half hour using both analog and digital clocks. **2.4.1.A.1** - Order lengths and measure them both indirectly and by repeating length units. **2.4.1.A.4** - Represent and interpret data using tables/charts.

Unit 4: Measurement and Data - continued	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
2.4 Measurement and Data • Describe and interpret data; Answer questions about data • Solve word problems involving the above skills	**2.4.1.A.4** - Represent and interpret data using tables/charts. **Habits of Mind of a Production Mathematical Thinker:** • Reasoning and Explaining • Modeling and Using Tools • Seeing Structure and Generalizing