## Department: Math

Course Name: Kindergarten Math

## Course Description:

The goal of the Kindergarten Math program is to introduce children to the following seven major mathematical content domains: number sense, algebra, measurement, geometry, time, money, data analysis, and probability. Children will count, sort, and describe shapes. They will compare sizes, estimate, and explore mathematical concepts in their environment. They will also observe, explore, share, and solve a wide range of problems using various methods. Students will explore mathematics as they interact with materials, each other, and their surroundings.

## Content:

Addends
Addition
Age
Analyze Data
Attribute Lengths using "shorter," "longer," \& "same"
Calendar
Characteristics
Coins
Count
Data Collection
Decimals
Equations

## Equivalence

Estimate
Fractions
Graphs-picture and bar
Inequalities
Language-math vocabulary
Length
Manipulatives
Match
Money
Number Lines
Odd/Even
Order
Patterns
Place Value
Positional Terms - Under, Over, Below, Top, Bottom
Prediction
Properties
Real World Problems
Regrouping
Rulers
Shapes
Subtraction
Survey

Symmetry
Temperature
Time
Vertices
Volume
Weight
Whole Numbers
Word Problems

## Skills:

Classify by shape, size, color, and number of corners, etc.
Demonstrate 1 to 1 correspondence to 20 by pointing to each object as it is counted
Create sets and label with the correct number
Perform interrupted verbal counting beyond 100 from a given number within a known sequence
Count backward from 30 or higher
Count by 1 's, 5 's and 10 's to 100
Count using ordinal numbers (1-10)
Read and write any number, 120 or less
Count using tally marks
Synthesize information to sort, tally, and graph items
Conduct simple surveys and generate 'yes', 'no' questions
Collect, graph and interpret simple data
Understand addition and subtraction concepts up to 12
Problem-solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing
Understand that each successive number's name refers to a quantity that is one larger
Identify 2-digit numbers in terms of 10's and 1's
Understand place value when adding two-digit numbers
Identify 10 more or 10 less than a given number
Perform simple estimation
Understand concepts of greater than, less than, and equal to
Identify and extend simple patterns and growing patterns of 3 objects
Sequence - first, next, then, \& last
Identify and write simple fractions, using the terms halves, thirds, fourths, and quarters
Estimate, measure, and compare standard and non-standard measurements to measure length, volume, and weight
Compare measurements and correctly use the terms shorter, longer, taller, heavier, lighter, more, less, etc.
Demonstrate understanding of positional relationships (above, below, before, after, middle, left, right)
Identify basic plane and solid figures
Analyze and compare two-dimensional and three-dimensional shapes
Describe and identify basic shapes (squares, triangles, circles, rectangles etc.)
Describe similarities and differences of basic shapes
Construct pictures that resemble houses, cars etc. using a variety of shapes
Understand simple symmetry
Recognize and know the value of a penny, nickel, dime, and quarter
Determine value of a collection of pennies, nickels, dimes, and quarters
Tell and write time in hours and half-hours using analog and digital clocks
Use the calendar to determine the day, date, month, and year

Name the days of the week/months of the year and which one comes next when given a certain day/month.

## Text and Materials:

McGraw Hill My Math Grade 1 Volumes 1 and Volume 2
McGraw Hill My Math Grade 1 - connectEd digital resource
Enchanted Learning, Enchanted Learning.com
Individual Whiteboard/Markers
Manipulatives
Puzzles
Classroom and Library Books
Happy Numbers Digital Curriculum
Heidi Songs
Methods of Instruction:
McGraw Hill My Math Grade 1 - connectEd digital resource
Workbook pages
Hands-on manipulatives (coins, clocks, cubes, cards, geometric shapes, measurement tools)
Math games
Computer games
Books
Puzzles
Small/large group instruction
Centers
Happy Numbers Digital Curriculum
Methods of Evaluation:
McGraw Hill Curriculum Assessments
Daily Classroom Work
Class Projects
Teacher Observation
Integrated Subject Projects
Happy Numbers Digital Curriculum Reports

