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