

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

Small Group Guided Math Modules by Deanna Jump

Enchanted Learning, Enchanted Learning.com

Individual Whiteboard/Markers

Manipulatives

Puzzles

Classroom and Library Books

IXL Math 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

IXL Math Digital Curriculum

Methods of Evaluation:

McGraw Hill Curriculum Assessments

Daily Classroom Work

Class Projects

Teacher Observation

Integrated Subject Projects

IXL Math Digital Curriculum