

Math Curriculum

Grade K

Important Concepts

- Identify, describe, and extend patterns based on shape, size, color, and numbers
- Identify different types of patterns
- Create a pattern using shapes, colors, or numbers
- Understand spatial concepts of over, under, beside, in, out, around, on, and between
- Use positional vocabulary to describe relative positions of objects
- Count using whole numbers to 29 by ones
- Relate counting to physical objects
- Use objects to represent quantities to 10
- Use objects to demonstrate understanding of one-to-one correspondence up to and including 10
- Read whole numbers 0-10
- Write whole numbers 0-5
- Display data on a bar graph and pictograph
- Understand why graphical representations of data are used
- Understand what information graphs can show
- Analyze graphs and make predictions
- Use graphical data to answer questions
- Count by whole numbers up to 49 by ones
- Write whole numbers 0-10
- Use concrete objects to demonstrate one-to-one correspondence up to and including 20
- Understand different ways to count to 49
- Use manipulatives to show quantities up to and including 20
- Understand number relationships—numbers that fall before, after, and between 0-20
- Understand the relationship between whole and half
- Divide a set of objects in half
- Use manipulatives to find before, after, and between on a number line

Vocabulary

Over
Under
Beside
In
Out
Around
On
Between
Pattern
Numbers
Count
More
Less
Same
Fewer
Graph
Data
Predict
Bar graph
Pictograph
Before
After
Between
Number line
Half
Divide
Equal
Whole
Part
Circle
Square
Triangle
Rectangle
Sphere
Cube
Cone
Cylinder
Symmetry
Rectangular prism

Math Curriculum

Grade K (con't)

Important Concepts

- Identify and whole object
- Understand equal parts
- Identify and locate two-dimensional and three-dimensional shapes
- Name two dimensional shapes
- Identify the properties of two dimensional shapes
- Create a picture using geometric shapes
- Understand where two & three dimensional shapes appear in the environment
- Use multiple units of the same size to measure
- Use nonstandard units to estimate the length and height of an object
- Compare the measurement of different objects
- Identify the instruments used for measuring time, weight, volume, temperature, and length
- Using a calendar to identify seasons, months, and dates
- Identify analog and digital clocks
- Tell time to the hour on analog and digital clocks
- Understand the relationship between the terms today, tomorrow, and yesterday relative to a calendar
- Counting using whole numbers up to 100 by ones and tens
- Create and count sets of ten using manipulatives
- Write whole numbers 0-20
- Read whole numbers 0-20
- Understand what it means to count by tens
- Use objects to represent quantities
- Identify characteristics of pennies, nickels, dimes, and quarter
- Count pennies, count dimes
- Count by ones to identify an amount of money
- Compare monetary values
- Understand the value represented by a given coin

Vocabulary

Longer
Shorter
Analog clock
Digital clock
Weight
Volume
Temperature
Thermometer
Scale
Calendar
Measure
Length
Penny
Nickel
Dime
Quarter
More
Less
Cents
Add
Subtract
Plus
Minus
Equal

Math Curriculum

Grade K (con't)

Important Concepts

- Understand what coins are used for
- Use picture / concrete object to represent the process of joining and separating sets
- Use numbers and symbols to represent addition and subtraction of concrete objects or pictures
- Solve a simple story problem and explain the process
- Identify the +, -, and = signs
- Understand where addition and subtraction occurs in the real world

Vocabulary