



Kindergarten Curriculum

Academic Area: Mathematics

Category: Counting and Introduction to Base Ten

Subcategory: Number Names and Basic Decimal System

Element 1: Counts to ten units using cards and counters

Element 2: Lays out loose numeral cards from 1 – 10 in correct sequence without the use of a control

Element 3: Associates numeral to quantity 1, 10, 100, and 1,000 using Golden Beads and color-coded number cards

Element 4: Identifies and names quantities from 1 to 9,999 using Golden Beads and color-coded number cards (Bank Game)

Element 5: Demonstrates an understanding of exchange between hierarchies using the Exchange Game

Element 6: Completes the 45 layout without assistance

Subcategory: Linear Counting

Element 1: Constructs, identifies, and names quantities from 10 – 90 using the tens board & Golden Bead ten bars

Element 2: Constructs, identifies, and names quantities from 11 – 19 using teen board & Golden Beads

Element 3: Associates quantity and numerals 1 – 99 with tens board, Golden Bead tens bars, and unit beads

Element 4: Counts from 1 – 100 by tens using the 100 chain and arrows

Element 5: Correctly completes the 100 board, recognizing vertical and diagonal patterns

Element 6: Counts from 1 – 1,000 by tens using the 1,000 chain and arrows

Element 7: Counts from 1 – 1,000 by hundreds using the 1,000 chain and arrows

Subcategory: Comparing Numbers

Element 1: Compares groups of objects using the correct terms and symbols for greater than, less, than, & equal to

Element 2: Compares 2 numbers between 1 and 10 presented as written numerals using the correct terms and symbols for greater than, less, than, & equal to

Category: Operations and Algebraic Thinking

Subcategory: Addition

Element 1: Creates sums of 5 and 10 with the number rods

Element 2: Adds 2 single-digit numbers with the number rods

Element 3: Creates sums of 10 using the colored beads and the snake game

Element 4: Adds quantities of 2 and 4 digit addends, without exchanging, using the Golden Beads

Element 5: Adds quantities of 2 and 4 digit addends, without exchanging, using the Stamp Game

Element 4: Adds quantities of 2 and 4 digit addends, with exchanging, using the Golden Beads

Element 5: Adds quantities of 2 and 4 digit addends, with exchanging, using the Stamp Game

Element 6: Demonstrates knowledge of addition facts for 2 addends, the sum or which is not larger than 10, using the Addition Strip Board

Element 7: Demonstrates knowledge of addition facts for 2 addends, the sum or which is larger than 10, using the Addition Strip Board

Element 8: Demonstrates the cumulative property of addition using the Golden Beads

Element 9: Solve simple addition word problems using the Golden Beads

Element 10: For any number, $1 - 9$, find the number that makes 10 when added to the given number

Subcategory: Subtraction

Element 1: Subtracts within 5 using the number rods

Element 2: Subtracts within 10 using the number rods

Element 3: Subtracts 2 and 4 digit numbers, without exchanging, using the Golden Beads

Element 4: Subtracts 2 and 4 digit numbers, without exchanging, using the Stamp Game

Element 5: Subtracts 2 and 4 digit numbers, with exchanging, using the Golden Beads

Element 6: Subtracts 2 and 4 digit numbers, with exchanging, using the Stamp Game

Element 7: Demonstrates knowledge of subtraction facts for 2 quantities between 1 and 18 using the Subtraction Strip Board

Element 8: Demonstrates knowledge of subtraction facts for 2 quantities between 1 and 18 using the negative snake game

Element 9: Solve simple subtraction word problems using the Golden Beads

Category: Time & Money

Subcategory: Time

Element 1: Understands these units of time: seconds, minutes, hours, days, weeks, months

Element 2: Understands that 60 seconds = 1 minute and 60 minutes = 1 hour

Element 3: Understands that 24 hours = 1 day and 7 days = 1 week

Element 4: Able to tell what time it is using an analog clock

Element 5: Able to tell what the date is using a calendar

Subcategory: Money

Element 1: Understands these units: pennies, dimes, nickels, quarters, dollars

Element 2: Understands these symbols: \$ and ¢

Element 3: Understands these equivalencies: 1 dollar = 100 pennies, 1 quarter = 25 pennies, 1 dime = 10 pennies, and 1 nickel = 5 pennies

Element 4: Able to use concrete materials to count units of money (ex: 3 quarters = 75 cents)

Category: Measurement

Subcategory: Length

Element 1: Uses the red rods to measure items in the classroom (ex: the shelf is = one red rod)

Element 2: Uses various objects to measure items in the classroom (ex: the table is 25 paperclips long)

Element 3: Understands inches and feet and can use a ruler to measure objects

Element 4: Makes comparisons with the units of measurement (ex: this girl is 2 inches taller than this boy)

Subcategory: Weight

Element 1: Uses a scale to weight various objects in the classroom and understands the units of ounces and pounds

Element 2: Uses a scale to compare the weights of two objects in the classroom, using the words heavier/lighter

Category: Fractions

Element 1: Recognizes fractions in everyday life (pizzas, pies, cakes, etc)

Element 2: Recognizes fractions using fraction cards and symbols

Element 3: Recognizes fractions using fraction skittles and symbols

Element 4: Recognizes and applies fraction family names: half, thirds, fourths, etc.

Category: Statistics and Graphing

Element 1: Reads pictographs and draws conclusions and inferences from the graphically displayed information

Element 2: Reads pie charts and draws conclusions and inferences from the graphically displayed information

Element 3: Reads bar graphs and draws conclusions and inferences from the graphically displayed information

Element 4: Gathers data and prepares simple graphs

Category: Geometry

Element 1: Identifies shapes as 2 dimensional (flat) or 3 dimensional (solid)

Element 2: Analyze and compare 2 and 3 dimensional shapes, in different sizes and orientations, using informal language to describe their similarities/differences, parts (number of sides and vertices/"corners") and other attributes (having sides of equal length).

Element 3: Use simple shapes to form larger shapes. (ex: "Can you join these two triangles with sides touching to make a rectangle?")

Element 4: Model shapes by building them from components such as sticks and clay balls and drawing shapes.

Element 5: Recognizes these 3D shapes: cube, sphere, cylinder, and cone

Element 6: Understands the concept of symmetry

