Content Scope & Sequence

GRADE K

SCOTT FORESMAN

Investigations

IN NUMBER, DATA, AND SPACE®

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Who Is in School Today?

Mathematical Emphases

❶ Counting and Quantity Developing strategies for accurately counting a set of objects by ones

Math Focus Points

- Counting the number of students in the class
- Using the calendar to count days
- Connecting number names, numerals, and quantities
- Establishing one-to-one correspondence between equal groups (e.g., students and cubes)
- Developing strategies for accurately counting and keeping track of quantities up to the number of students in the class
- Creating an equivalent set
- Counting, creating, and representing quantities

❷ Data Analysis Sorting and Classifying

Math Focus Points

- Identifying attributes (e.g., color, size, and shape) and developing language to describe them
- Comparing how objects are the same and different
- Finding objects that share one attribute
- Using attributes to sort a group of objects

❸ Data Analysis Carrying out a data investigation

Math Focus Points

- Collecting and keeping track of survey data
- Describing and comparing the number of pieces of data in each category
- Interpreting results of a data investigation

❹ Whole-Number Operations Using manipulatives, drawings, tools, and notation to show strategies and solutions

Math Focus Points

- Exploring math manipulatives and their attributes
- Using the calendar as a tool for keeping track of time and events
- Representing quantities with pictures, numbers, objects, and/or words

This Unit also focuses on

- Developing language to describe shapes, position, and quantity

Classroom Routines focus on

- Developing strategies for counting accurately
- Considering whether order matters when you count
- Comparing quantities
- Using the calendar as a tool for keeping track of time
- Collecting, counting, representing, describing, and comparing data

Counting and Comparing (Measurement and the Number System 1)

Mathematical Emphases

❶ Counting and Quantity Developing strategies for accurately counting a set of objects by ones

Math Focus Points

- Developing strategies for accurately counting and keeping track of quantities up to 12
- Connecting number words, numerals, and quantities
- Developing visual images for quantities up to 6
- Counting backwards

❷ Counting and Quantity Developing the idea of equivalence

Math Focus Points

- Creating an equivalent set
- Considering whether order matters when you count

❸ Linear Measurement Understanding length

Math Focus Points

- Directly comparing two objects to determine which is longer
- Sorting objects into two categories according to length
- Developing language to describe and compare lengths (long, longer than, short, shorter than, the same, equal to)

❹ Counting and Quantity Developing an understanding of the magnitude and position of numbers

Math Focus Points

- Comparing two (or more) quantities to determine which is more
- Developing language for comparing quantities (more, greater, less, fewer, most, least, fewest, same, and equal to)
- Ordering quantities from least to most

❺ Whole-Number Operations Using manipulatives, drawings, tools, and notation to show strategies and solutions

Math Focus Points

- Representing quantities with pictures, numbers, objects, and/or words
- Using numerals to represent quantities
- Using a Ten-Frame to develop visual images of quantities up to 10

Classroom Routines focus on

- Developing strategies for counting accurately
- Considering whether order matters when you count
- Using the calendar as a tool for keeping track of time
- Collecting, counting, representing, describing, and comparing data

Assessed Benchmarks

- Count a set of up to 10 objects
- Decide which of two objects is longer
- Compare two quantities up to 10 to see which is greater

What Comes Next? (Patterns and Functions)

Mathematical Emphases

❶ Data Analysis Sorting and classifying

Math Focus Points

- Finding objects that share one attribute
- Using attributes to sort a group of objects
- Comparing how objects are the same and different

❷ Repeating Patterns Constructing, describing, and extending repeating patterns

Math Focus Points

- Copying, constructing, comparing, describing, and recording repeating patterns
- Determining what comes next in a repeating pattern
- Comparing repeating and nonrepeating arrangements
- Distinguishing between patterns and nonpatterns
- Constructing a variety of patterns using the same elements
- Comparing different kinds of patterns

❸ Repeating Patterns Identifying the unit of a repeating pattern

Math Focus Points

- Identifying the unit of a repeating pattern
- Counting the number of units in a repeating pattern
- Extending a repeating pattern by adding on units to the pattern

This Unit also focuses on

- Observing and describing
- Using information to figure out what is missing
- Counting, creating, and representing quantities
- Counting 12 objects

Classroom Routines focus on

- Developing strategies for counting accurately
- Considering whether order matters when you count
- Comparing quantities
- Using the calendar as a tool for keeping track of time
- Collecting, counting, representing, describing, and comparing data
- Determining what comes next in a repeating pattern
- Describing repeating patterns

Assessed Benchmarks

- Copy, construct, and extend simple repeating patterns, such as AB, ABC
- Begin to identify the unit of a repeating pattern

Measuring and Counting (Measurement and the Number System 2)

Mathematical Emphases

❶ Linear Measurement Understanding length and using linear units

Math Focus Points

- Understanding what length is
- Identifying the longest dimension of an object
- Comparing lengths of different objects
- Repeating multiple nonstandard units to quantify length
- Developing strategies for measuring the length of an object

❷ Counting and Quantity Developing strategies for accurately counting a set of objects by ones

Math Focus Points

- Counting a set of objects and creating an equivalent set
- Connecting number words, numerals, and quantities
- Keeping track of a growing set of objects
- Counting spaces and moving on a gameboard
- Creating a set of a given size
- Developing and analyzing visual images for quantities up to 10

❸ Whole-Number Operations. Making sense of and developing strategies to solve addition and subtraction problems with small numbers

Math Focus Points

- Finding the total after a small amount (1, 2, 3) is added to a set of up to 7
- Combining two amounts
- Modeling the action of combining and separating situations
- Separating one amount from another
- Adding or subtracting one to/from numbers up to 10
- Adding to or subtracting from one quantity to make another quantity
- Decomposing numbers in different ways
- Exploring combinations of a number (e.g., 6 is 3 and 3 and also 5 and 1)

❹ Counting and Quantity Developing an understanding of the magnitude and position of numbers

Math Focus Points

- Developing an understanding of more than and fewer than
- Comparing two quantities to determine which is more

❺ Whole-Number Operations Using manipulatives, drawings, tools, and notation to show strategies and solutions

Math Focus Points

- Recording measurements with pictures, numbers, and/or words
- Using numbers to represent quantities and to record how many
- Using a Ten-Frame to develop visual images of quantities up to 10
- Recording an arrangement of a quantity

This Unit also focuses on

- Thinking strategically about moves on a gameboard

Classroom Routines focus on

- Using the calendar as a tool for keeping track of time
- Developing strategies for counting accurately
- Considering whether order matters when you count
- Comparing quantities
- Collecting, counting, representing, describing, and comparing data
- Determining what comes next in a repeating pattern
- Describing repeating patterns

Assessed Benchmarks

- Measure the length of an object by lining up multiple units
- Count a set of up to 15 objects
- Figure out what is one more or one fewer than a number

Make a Shape, Build a Block (2-D and 3-D Geometry)

Mathematical Emphases

❶ **Features of Shapes** Describing, identifying, comparing, and sorting 2-D and 3-D shapes

Math Focus Points

- Developing language to describe and compare 2-D and 3-D shapes and their attributes
- Relating 2-D and 3-D shapes to real-world objects
- Describing the attributes of circles and rectangles
- Describing the attributes of triangles and squares
- Exploring relationships among pattern block shapes
- Comparing the faces of different 3-D shapes and the faces of a single 3-D shape

❷ **Features of Shapes** Composing and decomposing 2-D and 3-D shapes

Math Focus Points

- Constructing 2-D shapes
- Finding combinations of shapes that fill an area
- Constructing 3-D shapes
- Combining 3-D shapes to make a given 3-D shape

This Unit also focuses on

- Exploring materials
- Relating 3-D objects to 2-D pictures of 3-D shapes
- Exploring Geoblocks and their attributes
- Matching a 3-D block to a 2-D outline of one of the block faces

Classroom Routines focus on

- Developing strategies for counting accurately
- Considering whether order matters when you count
- Comparing quantities
- Counting forward and backward
- Using the calendar as a tool for keeping track of time
- Collecting, counting, representing, describing, and comparing data
- Determining what comes next in a repeating pattern
- Describing repeating patterns

Assessed Benchmarks

- Describe the overall size, shape, function, and/or features of familiar 2-D and 3-D shapes
- Construct 2-D and 3-D shapes
- Make 2-D and 3-D shapes by combining shapes

How Many Do You Have? (Addition, Subtraction, and the Number System 3)

Mathematical Emphases

❶ Counting and Quantity Developing strategies for accurately counting a set of objects by ones

Math Focus Points

- Developing and analyzing visual images for quantities up to 10
- Developing strategies for accurately counting and keeping track of quantities up to 20
- Using subsets to count a set of objects
- Counting spaces and moving on a gameboard

❷ Whole-Number Operations Making sense of and developing strategies to solve addition and subtraction problems with small numbers

Math Focus Points

- Decomposing numbers in different ways
- Finding the total after 1, 2, or 3 is added to, or subtracted from, a set
- Combining two single-digit numbers, with totals to 20
- Modeling the action of combining and separating situations
- Separating one amount from another
- Developing strategies for solving addition and subtraction story problems
- Finding combinations of five and six
- Considering combinations of a number (e.g., 6 is 3 and 3 and also 5 and 1)

❸ Whole-Number Operations Using manipulatives, drawings, tools, and notation to show strategies and solutions

Math Focus Points

- Using numbers, and/or addition notation, to describe arrangements of objects, to record how many, and to represent an addition situation
- Using numbers, pictures, and/or words to represent a quantity, measurement, or a solution to a problem

This Unit also focuses on

- Creating an equivalent set
- Thinking strategically about moves on a gameboard
- Repeating multiple nonstandard units to quantify length
- Counting and comparing quantities to 20 to determine which is more
- Beginning to recognize that some problems have more than one solution

Classroom Routines focus on

- Developing strategies for counting accurately
- Considering whether order matters when you count
- Comparing quantities
- Counting forward and backward
- Using the calendar as a tool for keeping track of time
- Collecting, counting, representing, describing, and comparing data
- Determining what comes next in a repeating pattern
- Describing repeating patterns

Assessed Benchmarks

- Write the numbers up to 10
- Count a set of up to 20 objects
- Combine two small quantities

Sorting and Surveys (Data Analysis)

Mathematical Emphases

❶ Counting and Quantity Developing strategies for accurately counting a set of objects by ones

Math Focus Points

- Counting and keeping track of quantities
- Matching sets with a one-to-one correspondence
- Working with two-to-one correspondence
- Counting by groups of 2

❷ Data Analysis Representing data

Math Focus Points

- Making a representation of a set of data
- Seeing the one-to-one correspondence between a set of data and a representation of this data set

❸ Data Analysis Sorting and classifying

Math Focus Points

- Identifying the attributes of an object
- Identifying an attribute that is common to several objects
- Comparing how objects are the same and different
- Using attributes to sort a set of objects
- Grouping data into categories based on similar attributes
- Sorting a set of objects or data in different ways

❹ Data Analysis Carrying out a data investigation

Math Focus Points

- Choosing a survey question with two possible responses
- Collecting and keeping track of survey data
- Interpreting results of a data investigation
- Using data to solve a problem

This Unit also focuses on

- Comparing two quantities to determine which is more

Classroom Routines focus on

- Developing strategies for counting accurately
- Considering whether order matters when you count
- Comparing quantities
- Counting forward and backward
- Using the calendar as a tool for keeping track of time
- Collecting, counting, representing, describing, and comparing data
- Determining what comes next in a repeating pattern
- Describing repeating patterns

Assessed Benchmarks

- Represent a set of data
- Use data to solve a problem
- Sort a set of objects according to their attributes