

Blind Brook School District
Grade 1
Math Standards Curriculum Alignment
March 2008

September-October

Calendars, Number Sense and Every Day Use of Numbers

Content Strands

- 1.A.1 Determine and discuss patterns in arithmetic (what comes next in a repeating pattern, using numbers or objects)
- 1.M.8 Tell time to the hour, using both digital and analog clocks
- 1.M.9 Know the days of the week and months of the year in sequence
- 1.N.1 Count the items in a collection and know the last counting word tells how many items are in the collection (1 to 100)
- 1.N.3 Quickly see and label with a number, collections of 1 to 10
- 1.N.4 Count by 1's to 100
- 1.N.10 Draw pictures or other informal symbols to represent a spoken number up to 20
- 1.N.11 Identify that spacing of the same number of objects does not affect the quantity (conservation)
- 1.N.13 Write numbers to 100
- 1.N.16 Compare and order whole numbers up to 100
- 1.N.20 Name the number before and the number after a given number, and name the number(s) between two given numbers up to 100 (with and without the use of a number line or a hundreds chart)
- 1.N.21 Use before, after, or between to order numbers to 100 (with or without the use of a number line)
- 1.N.22 Use the words higher, lower, greater, and less to compare two numbers
- 1.N.23 Use and understand verbal ordinal terms, first to twentieth
- 1.N.27 Use a variety of strategies to solve addition and subtraction problems with one- and two-digit numbers without regrouping
- 1.N.28 Demonstrate fluency and apply addition and subtraction facts to and including 10
- 1.N.30 Estimate the number in a collection to 50 and then compare by counting the actual items in the collection
- 1.S.1 Pose questions about themselves and their surrounding
- 1.S.2 Collect and record data related to a question
- 1.S.3 Display data in simple pictographs for quantities up to 20 with units of one (Introduced through science; not in EM)
- 1.S.4 Display data in bar graphs using concrete objects with intervals of one
- 1.S.5 Use Venn diagrams to sort and describe data (Introduced through science; not in EM)
- 1.S.7 Answer simple questions related to data displayed in pictographs (e.g., category with most, how many more in a category compared to another, how many all together in two categories (Introduced through science; not in EM).

- 1.S.8 Discuss conclusions and make predictions in terms of the words likely and unlikely
- 1.S.9 Construct a question that can be answered by using information from a graph

Process Strands

- 1.CM.5 Formulate mathematically relevant questions
- 1.CM.6 Use appropriate mathematical terms, vocabulary, and language
- 1.CN.1 Recognize the connections of patterns in their everyday experiences to mathematical ideas
- 1.CN.2 Understand the connections between numbers and the quantities they represent
- 1.CN.3 Compare the similarities and differences of mathematical ideas
- 1.CN.4 Understand how models of situations involving objects, pictures, and symbols relate to mathematical ideas
- 1.CN.5 Understand meanings of operations and how they relate to one another
- 1.CN.6 Understand how mathematical models represent quantitative relationships
- 1.CN.7 Recognize the presence of mathematics in their daily lives
- 1.CN.8 Recognize and apply mathematics to solve problems
- 1.CN.9 Recognize and apply mathematics to objects, pictures, and symbols
- 1.PS.1 Explore, examine, and make observations about a social problem or mathematical situation
- 1.PS.2 Interpret information correctly, identify the problem, and generate possible solutions
- 1.PS.4 Formulate problems and solutions from everyday situations (e.g., counting the number of children in the class or using the calendar to teach counting)
- 1.PS.5 Use informal counting strategies to find solutions
- 1.R.1 Use multiple representations including verbal and written language, acting out or modeling a situation, drawings, and/or symbols as representations
- 1.R.3 Use standard and nonstandard representations
- 1.R.4 Connect mathematical representations with problem solving
- 1.R.5 Use mathematics to show and understand physical phenomena (e.g., estimate and represent the number of apples in a tree)
- 1.R.6 Use mathematics to show and understand social phenomena (e.g., count and represent sharing cookies between friends)
- 1.R.7 Use mathematics to show and understand mathematical phenomena (e.g., draw pictures to show a story problem, show number value using fingers on your hand)
- 1.RP.1 Understand that mathematical statements can be true or false
- 1.RP.3 Investigate the use of knowledgeable guessing as a mathematical tool
- 1.RP.4 Explore guesses, using a variety of objects and manipulatives
- 1.RP.8 Use trial and error strategies to verify claims

Vocabulary

Count	Autumn (fall)
Higher	Lower
Greater	Less
Compare	Compose
Decompose	Pattern

Estimate
Evening
Pictograph
Explore
Zero through ten
Greatest
Explore
Model using manipulatives
Use the language of mathematics
Between
After
Interpret
Equal
Graph
Explore
Examine
Count backwards
Count back
Time
Hour hand
Digital clock

Investigate
Recognize patterns
Apply mathematics
Next
Examine cardinal numbers
Make observations
Guesses
Bar graph
Hundred chart
Before
Arrange
Venn diagram
Representations
Non-standard representations
Multiple representations
Compare similarities and differences
Formulate questions
Decrease
Minute hand
Hour
Analog clock

October-November

Visual Patterns, Number Patterns, and Counting

Content Strands

- 1.M.4 Know vocabulary and recognize coins (penny, nickel, dime, quarter)
- 1.M.5 Recognize the cent notation as ¢
- 1.M.6 Use different combinations of coins to make money amounts up to 25 cents
- 1.M.7 Recognize specific times (morning, noon, afternoon, evening)
- 1.M.10 Classify months and connect to seasons and other events
- 1.N.5 Skip count by 10's to 100
- 1.N.6 Skip count by 5's to 50
- 1.N.7 Skip count by 2's to 20
- 1.N.8 Verbally count from a number other than one by 1's
- 1.N.9 Count backwards from 20 by 1's
- 1.N.14 Read the number words one, two, three...ten
- 1.N.18 Use a variety of strategies to compose and decompose one-digit numbers
- 1.N.24 Develop and use strategies to solve addition and subtraction word problems
- 1.N.26 Create problem situations that represent a given number sentence
- 1.N.29 Understand that different parts can be added to get the same whole
- 1.S.6 Interpret data in terms of the words: most, least, greater than, less than, or equal to

Process Strands

- 1.CM.1 Understand how to organize their thought processes with teacher guidance
- 1.CM.2 Verbally support their reasoning and answers
- 1.CM.3 Share mathematical ideas through the manipulation of objects, drawings, pictures, charts, and symbols in both written and verbal explanations
- 1.CM.4 Listen to solutions shared by other students
- 1.CN.3 Compare the similarities and differences of mathematical ideas
- 1.CN.4 Understand how models of situations involving objects, pictures, and symbols relate to mathematical ideas
- 1.CN.5 Understand meanings of operations and how they relate to one another
- 1.CN.6 Understand how mathematical models represent quantitative relationships
- 1.CN.8 Recognize and apply mathematics to solve problems
- 1.PS.1 Explore, examine, and make observations about a social problem or mathematical situation
- 1.PS.2 Interpret information correctly, identify the problem, and generate possible solutions
- 1.PS.3 Act out or model with manipulatives, activities involving mathematical content from literature and/or story telling
- 1.PS.6 Experience teacher-directed questioning process to understand problems
- 1.PS.7 Compare and discuss ideas for solving a problem with teacher and/or students to justify their thinking
- 1.PS.8 Use manipulatives (e.g., tiles, blocks) to model the action in problems
- 1.PS.9 Use drawings/pictures to model the action in problems
- 1.PS.10 Explain to others how a problem was solved, giving strategies and justifications

- 1.R.2 Share mental images of mathematical ideas and understandings
- 1.R.3 Use standard and nonstandard representations
- 1.R.4 Connect mathematical representations with problem solving
- 1.R.6 Use mathematics to show and understand social phenomena (e.g., count and represent sharing cookies between friends)
- 1.R.7 Use mathematics to show and understand mathematical phenomena (e.g., draw pictures to show a story problem, show number value using fingers on your hand)
- 1.RP.1 Understand that mathematical statements can be true or false
- 1.RP.2 Recognize that mathematical ideas need to be supported by evidence
- 1.RP.5 Justify general claims, using manipulatives
- 1.RP.6 Develop and explain an argument verbally or with objects
- 1.RP.7 Listen to and discuss claims other students make
- 1.RP.8 Use trial and error strategies to verify claims

Vocabulary

Justify	Justify claims
Data	Most
Least	Organize
Greater than	Explain
Less than	Compare
Equal to	Number in words
Morning	Order
Noon	Week
Months of the year	Seasons
Winter	Afternoon
Calendar	Spring
Summer	Fall
Evening	Addend
Addition fact	Addition
Sentence	Addition sign
Plus	Plus sign
Recognize	Skip count
Sum	Increasing
One digit	Decreasing
Formulate	Different
Develop an argument	Whole
Trial and error	Number sentence
Understand relationships	Cent
Nickel	Coin
Penny	Dime
Quarter	Money
Amount	Commutative property of addition

November-December

Measurement

Content Strands

- 1.M.1 Recognize length as an attribute that can be measured
- 1.M.2 Use non-standard units (including finger lengths, paper clips, students' feet and paces) to measure both vertical and horizontal lengths
- 1.M.3 Informally explore the standard unit of measure, inch
- 1.M.11 Select and use non-standard units to estimate measurements

Process Strands

- 1.CN.3 Compare the similarities and differences of mathematical ideas
- 1.CN.4 Understand how models of situations involving objects, pictures, and symbols relate to mathematical ideas
- 1.CN.5 Understand meanings of operations and how they relate to one another
- 1.CN.6 Understand how mathematical models represent quantitative relationships
- 1.CN.8 Recognize and apply mathematics to solve problems
- 1.PS.1 Explore, examine, and make observations about a social problem or mathematical situation
- 1.PS.2 Interpret information correctly, identify the problem, and generate possible solutions
- 1.R.3 Use standard and nonstandard representations
- 1.R.4 Connect mathematical representations with problem solving
- 1.R.6 Use mathematics to show and understand social phenomena (e.g., count and represent sharing cookies between friends)
- 1.R.7 Use mathematics to show and understand mathematical phenomena (e.g., draw pictures to show a story problem, show number value using fingers on your hand)
- 1.RP.1 Understand that mathematical statements can be true or false
- 1.RP.8 Use trial and error strategies to verify claims

Vocabulary

Inch	Units
Ruler	Standard units
Width	Length
Long	Non standard

December - January

Place Value, Number Stories and Basic Facts

Content Strands

- 1.N.2 Count out (produce) a collection of a specified size (10 to 100 items), using groups of ten
- 1.N.12 Arrange objects in size order (increasing and decreasing)
- 1.N.15 Explore and use place value
- 1.N.17 Develop an initial understanding of the base ten system:
10 ones = 1 ten
10 tens = 1 hundred
- 1.N.19 Understand the commutative property of addition (not in EM but will appear in this unit)
- 1.N.25 Represent addition and subtraction word problems and their solutions as number sentences

Process Strands

- 1.CN.4 Understand how models of situations involving objects, pictures, and symbols relate to mathematical ideas
- 1.CN.5 Understand meanings of operations and how they relate to one another
- 1.CN.6 Understand how mathematical models represent quantitative relationships
- 1.CN.8 Recognize and apply mathematics to solve problems
- 1.PS.1 Explore, examine, and make observations about a social problem or mathematical situation
- 1.PS.2 Interpret information correctly, identify the problem, and generate possible solutions
- 1.R.3 Use standard and nonstandard representations
- 1.R.4 Connect mathematical representations with problem solving
- 1.R.6 Use mathematics to show and understand social phenomena (e.g., count and represent sharing cookies between friends)
- 1.R.7 Use mathematics to show and understand mathematical phenomena (e.g., draw pictures to show a story problem, show number value using fingers on your hand)
- 1.RP.1 Understand that mathematical statements can be true or false
- 1.RP.8 Use trial and error strategies to verify claims

Vocabulary

- | | |
|---|------------------------|
| Ordinal numbers (first through twentieth) | Ones place |
| Tens place | Place value |
| Two-digit | Base ten number system |
| Understand meanings of operations | |

January-February

Addition and Subtraction Problems

Content Strands

- 1.N.27 Use a variety of strategies to solve addition and subtraction problems with one- and two-digit numbers without regrouping
- 1.N.28 Demonstrate fluency and apply addition and subtraction facts to and including 10

Process Strands

- 1.PS.2 Interpret information correctly, identify the problem, and generate possible solutions
- 1.R.6 Use mathematics to show and understand social phenomena (e.g., count and represent sharing cookies between friends)
- 1.R.7 Use mathematics to show and understand mathematical phenomena (e.g., draw pictures to show a story problem, show number value using fingers on your hand)
- 1.RP.8 Use trial and error strategies to verify claims

Vocabulary

Subtract	Minus sign
Subtraction	Minus
Subtraction facts	Difference
Subtraction sentence	Subtraction sign
Digit	

February-March

Geometry and Attributes

Content Strands

- 1.G.1 Match shapes and parts of shapes to justify congruency
- 1.G.2 Recognize, name, describe, create, sort, and compare two-dimensional and three-dimensional shapes
- 1.G.3 Experiment with slides, flips, and turns of two-dimensional shapes
- 1.G.4 Identify symmetry in two-dimensional shapes
- 1.G.5 Recognize geometric shapes and structures in the environment

Process Strands

- 1.CN.3 Compare the similarities and differences of mathematical ideas
- 1.CN.4 Understand how models of situations involving objects, pictures, and symbols relate to mathematical ideas
- 1.CN.6 Understand how mathematical models represent quantitative relationships
- 1.CN.8 Recognize and apply mathematics to solve problems
- 1.PS.1 Explore, examine, and make observations about a social problem or mathematical situation

Vocabulary

Symmetry	Rectangle
Turn (rotation)	Same side
Circle	Square
Cone	Triangle
Cube	Corner
Cylinder	Congruency
Horizontal	Vertical
Flip (reflection)	

March-April

Mental Arithmetic, Money and Fractions

Content Strands

- 1.N.18 Use a variety of strategies to compose and decompose one-digit numbers
- 1.N.24 Develop and use strategies to solve addition and subtraction word problems
- 1.N.26 Create problem situations that represent a given number sentence
- 1.N.29 Understand that different parts can be added to get the same whole
- 1.S.6 Interpret data in terms of the words: most, least, greater than, less than, or equal to
- 1.M.4 Know vocabulary and recognize coins (penny, nickel, dime, quarter)
- 1.M.5 Recognize the cent notation as ¢
- 1.M.6 Use different combinations of coins to make money amounts up to 25 cents

Process Strands

- 1.CM.1 Understand how to organize their thought processes with teacher guidance
- 1.CM.2 Verbally support their reasoning and answers
- 1.CM.3 Share mathematical ideas through the manipulation of objects, drawings, pictures, charts, and symbols in both written and verbal explanations
- 1.CM.4 Listen to solutions shared by other students
- 1.CN.3 Compare the similarities and differences of mathematical ideas
- 1.R.2 Share mental images of mathematical ideas and understandings
- 1.RP.2 Recognize that mathematical ideas need to be supported by evidence
- 1.PS.7 Compare and discuss ideas for solving a problem with teacher and/or students to justify their thinking
- 1.PS.8 Use manipulatives (e.g., tiles, blocks) to model the action in problems
- 1.PS.9 Use drawings/pictures to model the action in problems
- 1.PS.10 Explain to others how a problem was solved, giving strategies and justifications

Vocabulary

Justify	Justify claims	Whole
Data	Most	Equal parts
Least	Organize	Halves
Greater than	Explain	Thirds
Less than	Compare	Fourths
Equal to	Fraction	Fractional part
Trial and error	Number sentence	
Understand relationships	Cent	
Nickel	Coin	
Penny	Dime	
Quarter	Money	

April -May

Place Value and Fractions

Content Strands

- 1.N.15 Explore and use place value
- 1.N.17 Develop an initial understanding of the base ten system:
 - 10 ones = 1 ten
 - 10 tens = 1 hundred

Process Strands

- 1.CN.4 Understand how models of situations involving objects, pictures, and symbols relate to mathematical ideas
- 1.CN.6 Understand how mathematical models represent quantitative relationships
- 1.PS.2 Interpret information correctly, identify the problem, and generate possible solutions
- 1.R.3 Use standard and nonstandard representations
- 1.R.4 Connect mathematical representations with problem solving
- 1.RP.8 Use trial and error strategies to verify claims

Vocabulary

Place value
Ones place
Tens place
Base-ten number system
Understand meanings of operations

May – June
Year End Review and Assessments