

Lakewood City Schools Mathematics Course of Study – First Grade

Welcome to First Grade Mathematics. Below is an outline of four major components of the program you will be using this year.

I. Lakewood City Schools Course of Study

- Arranged by mandated Academic Content Standards
- Each Standard is coordinated with K-2 Benchmarks and Grade Level Indicators
- Lakewood City Schools Course of Study is aligned with the Ohio Department of Education’s Academic Content Standards

II. Pacing & Sequencing Chart

- A functional and fluid document meant to be utilized by teachers
- Grade Level Indicators reference Content Standards defined in the Lakewood City Schools Course of Study
- Suggested time frame included for pacing units
- Lesson modifications meant to assist teacher with planning
- Inclusion of teacher notes encouraged as lessons are implemented

III. Everyday Mathematics Teacher’s Manual

- Provides a comprehensive overview
- Introductory pages at the beginning of each lesson include essential strategies and information
- Instructional strategies offered throughout the lesson
- Structured in 3 parts:
 - 1) Teaching the Lesson (main objective)
 - 2) Ongoing Learning and Practice (extending skill)
 - 3) Options for Individualizing (remedial or enrichment activities)
- Everyday Mathematics Content by Strand Pacing Chart

IV. Everyday Mathematics Teacher Reference Manual

- Includes useful suggestions for implementation of Everyday Mathematics
- Provides ideas for organizing curriculum, students and materials
- Easily accessible source of reliable mathematical knowledge
- Essential to understanding Everyday Mathematics program
- Can enhance personal comfort level of mathematical knowledge

These tools will assist you and your students as you work toward mathematical proficiency.

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Mathematical Processes Standard

Students use mathematical processes and knowledge to solve problems. Students apply problem-solving and decision-making techniques, and communicate mathematical ideas.

NOTE: Mathematical processes are used in all content areas and should be incorporated within instruction and assessment of the content specific standards and benchmarks.

K-2 Benchmarks	Grade Level Indicators
<p>A. Use a variety of strategies to understand problem situations; e.g., discussing with peers, stating problems in own words, modeling problems with diagrams or physical materials, identifying a pattern.</p> <p>B. Identify and restate in own words the question or problem and the information needed to solve the problem.</p> <p>C. Generate alternative strategies to solve problems.</p> <p>D. Evaluate the reasonableness of predictions, estimations and solutions.</p> <p>E. Explain to others how a problem was solved.</p> <p>F. Draw pictures and use physical models to represent problem situations and solutions.</p> <p>G. Use invented and conventional symbols and common language to describe a problem situation and solution.</p> <p>H. Recognize the mathematical meaning of common words and phrases, and relate everyday language to mathematical language and symbols.</p> <p>I. Communicate mathematical thinking by using everyday language and appropriate mathematical language.</p>	<p>By the end of Grade 1, the student will:</p> <ol style="list-style-type: none"> 1. Solve problems that arise in mathematics and other contexts. <ol style="list-style-type: none"> a. Identify needed information and operations to solve problems. b. Apply appropriate strategies to solve problems. <ul style="list-style-type: none"> • Look for a pattern, guess and check, act it out. c. Explain and validate process of finding a solution. <ul style="list-style-type: none"> • Communicate using words (oral or written). 2. Communicate mathematical thinking through pictures, numbers, and words. <ol style="list-style-type: none"> a. Express thinking to peers, teachers, and others. b. Use the language of mathematics to express mathematical ideas. c. Use representations to organize, record, and communicate mathematical ideas. d. Use tables, charts, numbers, and drawings to sort information. 3. Analyze and evaluate the mathematical thinking of others. <ol style="list-style-type: none"> a. Listen and question others' strategies and results. 4. Evaluate the reasonableness of mathematical statements and solutions using examples and counter examples. <ol style="list-style-type: none"> a. Use models, number relationships, and logic. b. Select and use various types of reasoning and methods of proof.

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Standard 1: Number, Number Sense and Operations

Students demonstrate number sense including an understanding of number systems and operations, and how they relate to one another. Students compute fluently and make reasonable estimates using paper and pencil, technology-supported and mental methods.

SMART Essential Focus: Students should know the concept of place value and the operations of addition and subtraction.

K-2 Benchmarks	Grade Level Indicators	Corresponding Everyday Mathematics Units
<p>A. Use place value concepts to represent whole numbers using numerals, words and physical models.</p> <p>B. Recognize, classify, compare and order whole numbers.</p> <p>C. Represent commonly used fractions using words and physical models.</p> <p>D. Determine the value of a collection of coins and dollar bills.</p> <p>E. Make change using coins for values up to one dollar.</p> <p>F. Count, using numerals and ordinal numbers.</p> <p>G. Model, represent and explain addition as combining sets and counting on.</p>	<p>By the end of Grade 1, the student will:</p> <p>Number and Number Systems</p> <ol style="list-style-type: none"> 1. Use ordinal numbers to order objects; e.g., first, second, third. (B) 2. Recognize and generate equivalent forms for the same number using physical models, words and numbers expressions; e.g., concept of ten is described by “10 blocks”, full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age. (B) 3. Read and write the numerals for numbers to 100. (A) 4. Count forward to 100, count backward from 100, and count forward or backward starting at any number between 1 and 100. (B, F) 5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example: <ol style="list-style-type: none"> a. Develop a system to group and count by twos, fives and tens. b. Identify patterns and groupings in a 100’s chart and relate to place value concepts. c. Recognize the first digit of a two digit number as the most important to indicate size of a number and the nearness to 10 or 100. (A) 6. Identify and state the value of a penny, nickel, dime, quarter and dollar. (D) 7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type coins, including pennies, nickels, dimes and quarters. (D) 8. Show different combinations of coins that have the same value. (E) 9. Represent commonly used fraction using words and physical models for halves, thirds and fourths, recognize fractions are represented by equal size parts of a whole and of a set of objects. <p style="text-align: center;">Letters in bold correspond to related benchmark.</p>	<p>Unit 5 Unit 6</p> <p>Units 1, 2 and 4 Unit 2</p> <p>Units 1, 2, 3 and 4 Units 2, 3 and 9</p> <p>Units 5 and 8</p> <p>Units 2, 3 and 6</p> <p>Units 2, 3, 6, and 8</p> <p>Units 2, 3, 6, 7 Units 8 and 9</p>

<p>H. Model, represent and explain subtraction as comparison, take-away and part-to-whole.</p> <p>I. Model, represent and explain multiplication as repeated addition, rectangular arrays and skip counting.</p> <p>J. Model, represent and explain division as sharing equally, repeated subtraction and rectangular arrays.</p> <p>K. Demonstrate fluency in addition facts with addends through 9 and corresponding subtractions.</p> <p>L. Demonstrate fluency in adding and subtracting multiples of 10, and recognize combinations that make 10.</p> <p>M. Add and subtract two-digit numbers with and without regrouping.</p>	<p>Meaning of Operations</p> <p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ol style="list-style-type: none"> Model and explain addition using physical materials in contextual situations. Draw pictures to model addition. Write number sentences to represent addition. Explain that adding two whole numbers yields a larger whole number. (G, K) <p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. (H, K) <p>12. Use conventional symbols to represent the operations of addition and subtraction. (G, H)</p> <p>13. Model and represent multiplication as repeated addition and rectangular arrays in contextual situations; e.g. four people will be at my party and if I want to give 3 balloons to each person, how many balloons will I need to buy? (I)</p> <p>14. Model and represent division as sharing equally in contextual situations; e.g., sharing cookies. (J)</p> <p>15. Demonstrate that equal means “the same as” using visual representations. (B)</p> <p>Computation and Estimation</p> <p>16. Develop strategies for basic addition facts, such as: counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero)</p> <p>17. Develop strategies for basic subtraction facts, such as: relating to addition (for example, thinking of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends.</p> <p style="text-align: center;">Letters in bold correspond to related benchmark.</p>	<p>Units 1, 2, 3 and 4</p> <p>Unit 1 and throughout other units</p> <p>Units 1 and 2</p> <p>Units 2 and 3</p> <p>Unit 2</p> <p>Units 8 and 9</p> <p>Unit 5</p> <p>Units 1, 2, 4, 5, 6 and 9</p> <p>Units 1, 2, and 4</p>
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Standard 2: Measurement

Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.

SMART Essential Focus: Students should know how to use customary units of length to measure.

K-2 Benchmarks	Grade Level Indicators	Corresponding Everyday Mathematics Units
<p>A. Explain the need for standard units of measure.</p> <p>B. Select appropriate units for length, weight, volume (capacity) and time, using:</p> <ul style="list-style-type: none"> • objects; i.e., non-standard units; • U.S. customary units: inch, foot, yard, ounce, pound, cup, quart, gallon, minute, hour, day, week and year; • metric units: centimeter, meter, gram and liter. <p>C. Develop common referents for units of measure for length, weight volume (capacity) and time to make comparisons and estimates.</p> <p>D. Apply measurement techniques to measure length, weight and volume (capacity).</p> <p>E. Recognize that using different units of measurement will yield different numbers for the same measurement.</p>	<p>By the end of Grade 1, the student will:</p> <p>Measurement Units</p> <ol style="list-style-type: none"> 1. Recognize and explain the needs for fixed units and tools for measuring length and weight; e.g., rulers and balance scales. (A) 2. Tell time to the hour and half hour on digital and analog (dial) timepieces. (C) 3. Order a sequence of events with respect to time; e.g., summer, fall, winter and spring; morning, afternoon and night. (C) 	<p>Units 4, 6, 7, 1, and 10</p> <p>Units 2, 3, and 6</p> <p>Unit 1</p>
	<p>Use Measurement Techniques and Tools</p> <ol style="list-style-type: none"> 4. Estimate and measure weight using non-standard units; e.g., block of uniform size. (D) 5. Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet. (D) <p style="text-align: center;">Letters in bold correspond to related benchmark.</p>	<p>Unit 5</p> <p>Units 4 and 6</p>

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Standard 3: Geometry and Spatial Sense

Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two-, and three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.

SMART Essential Focus: Students should know how to identify and compare two-dimensional shapes.

K-2 Benchmarks	Grade Level Indicators	Corresponding Everyday Mathematics Units
<p>A. Describe and create plane figures: circle, rectangle, square, triangle, hexagon, trapezoid, parallelogram and rhombus, and identify them in the environment.</p> <p>B. Describe solid objects: cube, rectangular prism, sphere, cylinder, cone and pyramid, and identify them in the environment.</p> <p>C. Sort and compare two-dimensional figures and three-dimensional objects according to their characteristics and properties.</p> <p>D. Identify, explain and model (superposition, copying) the concept of shapes being congruent and similar.</p> <p>E. Recognize two- and three-dimensional objects from different positions.</p> <p>F. Describe location, using comparative (before, after), directional (above, below), and positional (first, last) words.</p> <p>G. Identify and draw figures with line symmetry.</p>	<p>By the end of Grade 1, the student will:</p> <p>Characteristics and Properties</p> <ol style="list-style-type: none"> 1. Identify, compare and sort two-dimensional shapes; i.e., square, circle, ellipse, triangle, rectangle, rhombus, trapezoid, parallelogram, pentagon and hexagon. For example: <ol style="list-style-type: none"> a. Recognize and identify triangles and rhombuses independent of position, shape or size; b. Describe two-dimensional shapes using attributes such as number of sides and number of vertices (corners or angles). (C) 2. Create new shapes by combining or cutting apart existing shapes. (A) 3. Identify the shapes of the faces of three-dimensional objects. (A, B) <p>Spatial Relationships</p> <ol style="list-style-type: none"> 4. Extend the use of location words to include distance (near, far, close to) and directional words (left, right). (F) 5. Copy figures and draws simple two-dimensional shapes from memory. (D, E, G) <p style="text-align: center;">Letters in bold correspond to related benchmark.</p>	<p>Units 6, 7, 8, and 10</p> <p>Unit 7</p> <p>Unit 7</p> <p>Units 7 and 10</p> <p>Unit 2</p> <p>Units 1 and 7</p>

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Standard 4: Patterns, Functions and Algebra

Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.

SMART Essential Focus: Students should know how to recognize and extend patterns.

K-2 Benchmarks	Grade Level Indicators	Corresponding Everyday Mathematics Units
<p>A. Sort, classify and order objects by size, number and other properties, and describe the attributes used.</p> <p>B. Extend sequences of sounds and shapes or simple number patterns, and create and record similar patterns.</p> <p>C. Create and extend patterns, and describe the rule in words.</p> <p>D. Model problem situations, using objects, pictures, numbers and other symbols.</p> <p>E. Solve open sentences and explain strategies.</p>	<p>By the end of Grade 1, the student will:</p> <p>Use Patterns, Relations and Functions</p> <ol style="list-style-type: none"> 1. Sort, classify and order objects by two or more attributes, such as color and shape, and explain how objects were sorted. (A) 2. Extend sequences of sounds, shapes or simple number patterns, and create and record similar patterns. For example: <ol style="list-style-type: none"> a. Analyze and describe patterns with multiple attributes using numbers and shapes; e.g., AA, B, aa, b, AA, B, aa, b, ... b. Continue repeating and growing patterns with materials, pictures and geometric items; e.g., XO, XOO, XOOO, XOOO. (B) 3. Describe orally the basic unit or general plan of a repeating or growing pattern. (C) 	<p>Units 1, 2, 4, and 7</p> <p>Unit 3</p> <p>Unit 5</p>
	<p>F. Represent an unknown quantity as a variable using a symbol, such as □, Δ, O.</p> <p>G. Describe and compare qualitative and quantitative changes.</p>	<p>Use Algebraic Representations</p> <ol style="list-style-type: none"> 4. Solve open sentences by representing an expression in more than one way using the commutative property; e.g., $4 + 5 = 5 + 4$ or the number of blue balls plus red balls is the same as the number of red balls plus blue balls ($R + B = B + R$). (E) 5. Describe orally and model a problem situation using words, objects or number phrase or sentence. (D)
<p>Letters in bold correspond to related benchmark.</p>		

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Standard 5: Data Analysis and Probability

Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

SMART Essential Focus: Students should know how to collect, sort, represent, and analyze data.

K-2 Benchmarks	Grade Level Indicators	Corresponding Everyday Mathematics Units
<p>A. Pose questions and gathers data about everyday situations and familiar objects.</p> <p>B. Sort and classify objects by attributes, and organize data into categories in a simple table or chart.</p> <p>C. Represent data using objects, picture graphs and bar graphs.</p> <p>D. Describe the probability of chance events as more, less or equally likely to occur.</p>	<p>By the end of Grade 1, the student will:</p> <p>Data Collection</p> <ol style="list-style-type: none"> 1. Identify multiple categories for sorting data. (B) 2. Collect and organize data into charts using tally marks. (B) 3. Display data in picture graphs with units of 1 and bar graphs with intervals of 1. (C) 4. Read and interpret charts, picture graphs and bar graphs as sources of information to identify main ideas, draw conclusions, and make predictions. (C) 5. Construct a question that can be answered by using information from a graph. (A) <p>Statistical Methods</p> <ol style="list-style-type: none"> 6. Arrange five objects by an attribute, such as size or weight, and identify the ordinal position of each object. (B) 7. Answer questions about the number of objects represented in a picture graph, bar graph or table graph; e.g., category with most, how many more in a category compared to another, how many altogether in two categories. (B) <p>Probability</p> <ol style="list-style-type: none"> 8. Describe the likelihood of simple events as possible/impossible and more likely/less likely; e.g., when using spinners or number cubes in classroom activities. (D) <p style="text-align: center;">Letters in bold correspond to related benchmark.</p>	<p>Units 1, 3, 4, 6, and 7</p> <p>Units 1, 3, 6</p> <p>Units 4, 6, and 7</p> <p>Units 1, 3, 4, 6, and 7</p> <p>(teacher generated activity) Unit 5</p> <p>(teacher generated activity)</p>

Key Information about 1st Grade Everyday Mathematics Program

Recommendations for the Teacher:

- Before each new unit, study Overview pages to learn which learning goals are Beginning, Developing, or Secure. This will help determine the amount of time spent on individual lessons.
- Become familiar with games and related activities.
- Display and use mathematical language and vocabulary throughout the classroom day.
- Tool kits – for some teachers it is easier to keep materials as class sets and hand out as needed per lesson.
- “Getting Started” Activities (Mental Math, Math Message): Use during times of transition during the day.
- Explorations can be taught and then used as a center activity or directed by a volunteer. The activities require another adult to supervise, and prior preparation is necessary.
- Journal pages need to be teacher directed for the most part.
- Money journal pages need use of real coins to manipulate to complete.
- Math Boxes need to be teacher directed early in the school year.
- Make copies of game pages in journals to use for games. These pages are difficult to use in journal. The students will have blank game pages when they take books home.
- Math games after instruction can be put out at centers for independent practice.

General Statements for Modifications:

- “Getting Started” Activities: Due to time constraints, modify how much time spent on each one or you may find you can omit.
- Math Boxes: need to be done more with whole class as a directed activity for a while rather than independently. This takes more time in the beginning.
- Math Games and Explorations: can be used as center activities (as review) *and for Ongoing Learning and Practice.
- Journal Pages: need to be directed activities for the most part.
- Options for Individualizing: is good to use for center activities.
- Home-Link Follow-Ups: optional or omit due to teacher preference.
- Money on Journal Pages: difficult for children to count. They need to use real coins.
- Math Messages: pick and choose teacher preference. Time constraint – check to see if it is pertinent to the lesson.
- Make copies of games pages in journals to use for games. Then they have them blank when they take them home when completed.

First Grade – Pacing & Sequencing Chart for Everyday Mathematics Program

Key: NNS & O = Number, Number Sense & Operations Standard
 M = Measurement Standard
 G & SS = Geometry & Spatial Sense Standard

PF & A = Patterns, Functions & Algebra Standard
 DA & P = Data Analysis & Probability Standard
 MP = Mathematical Processes

*Note: # of Weeks suggested based on a minimum of 60 minutes daily

Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
1. Establishing Routines	<p>NNS & O:</p> <p>2. Recognize and generate equivalent forms for the same number using physical models, words and number expressions; e.g., concept of ten is described by “10 blocks,” full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age.</p> <p>3. Read and write the numerals for numbers to 100.</p> <p>4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100.</p> <p>5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example:</p> <p>a. Develop a system to group and count by twos, fives and tens.</p> <p>b. Identify patterns and groupings in a 100’s chart and relate to place value concepts.</p> <p>c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100.</p> <p>6. Identify and state the value of a penny, nickel, dime, quarter and dollar.</p> <p>7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters.</p>	<p>1.7</p> <p>1.1, 1.2, 1.3, 1.5, 1.7, 1.8, 1.9, 1.10, 1.11, 1.13</p> <p>1.1, 1.2, 1.6, 1.11</p> <p>1.5, 1.7, 1.11, 1.12, 1.13</p> <p>1.3, 1.4, 1.10</p> <p>1.3, 1.10</p>	<p>3 Weeks (August – Mid-September)</p> <ul style="list-style-type: none"> • 1.1 teacher preference assigning class jobs; taking attendance up to individual teacher. • 1.3 teacher preference - tool kits; for some teachers it is easier to just hand out individual tools needed for lessons rather than a “kit” for each child. • 1.5 have individual number lines rather than use number line in back of journals. • 1.9 teacher preference as how calendar is introduced. • 1.12 teacher preference as how weather routine is introduced. <p><u>Assessment Verbs:</u> solve problems identify apply look for a pattern explain validate communicate express use representations organize record sort analyze evaluate use models</p>

	<p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ol style="list-style-type: none"> Model and explain addition using physical materials in contextual situations. Draw pictures to model addition. Write number sentences to represent addition. Explain that adding two whole numbers yields a larger whole number. <p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>12. Use conventional symbols to represent the operations of addition and subtraction.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ol style="list-style-type: none"> relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends. 	<p>1.13</p> <p>1.13</p> <p>1.10</p> <p>1.5, 1.7, 1.13</p> <p>1.5, 1.13</p>	<p>Assessment Verbs: (Continued)</p> <p>recognize generate tell order count develop read write determine estimate show measure represent model, represent and explain identify, compare and sort describe create extend copy sort, classify and order continue collect and organize display read and interpret draw conclusions make predictions construct arrange answer</p>
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	<p>PF & A: 5. Describe orally and model a problem situation using words, objects or number phrase or sentence.</p> <p>DA & P: 2. Collect and organize data into charts using tally marks. 4. Read and interpret charts, picture graphs and bar graphs as sources of information to identify main ideas, draw conclusions, and make predictions. 8. Describe the likelihood of simple events as possible/impossible and more likely/less likely; e.g., when using spinners or number cubes in classroom activities.</p>	<p>1.13</p> <p>1.2, 1.8, 1.12</p> <p>1.8</p> <p>1.8</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
2. Everyday Uses of Numbers	<p>NNS & O:</p> <ol style="list-style-type: none"> 1. Use ordinal numbers to order objects; e.g., first, second, third. 2. Recognize and generate equivalent forms for the same number using physical models, words and number expressions; e.g., concept of ten is described by “10 blocks,” full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age. 3. Read and write the numerals for numbers to 100. 4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100. 5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example: <ol style="list-style-type: none"> a. Develop a system to group and count by twos, fives and tens. b. Identify patterns and groupings in a 100’s chart and relate to place value concepts. c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100. 6. Identify and state the value of a penny, nickel, dime, quarter and dollar. 7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters. 8. Show different combinations of coins that have the same value. 	<p>2.2</p> <p>2.2, 2.4, 2.13</p> <p>2.1, 2.2, 2.3, 2.4, 2.5</p> <p>2.1, 2.2, 2.3, 2.4</p> <p>2.1, 2.2, 2.3, 2.4, 2.7, 2.9, 2.10, 2.13</p> <p>2.3, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13</p> <p>2.3, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13</p> <p>2.9, 2.10, 2.12, 2.13</p>	<p>4 Weeks (Mid-September – October)</p> <ul style="list-style-type: none"> • Story of Money poster could be optional. • 2.1 have individual number lines rather than use number line in back of journals. • 2.9 Connect-the-Dot Picture (done at another time – such as bellwork). • 2.11 Nickel/Penny Grab Activity – recording in journal is <u>very confusing</u> for students. Either omit recording or modify for your students.

	<p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ol style="list-style-type: none"> Model and explain addition using physical materials in contextual situations. Draw pictures to model addition. Write number sentences to represent addition. Explain that adding two whole numbers yields a larger whole number. <p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>12. Use conventional symbols to represent the operations of addition and subtraction.</p> <p>15. Demonstrate that equal means “the same as” using visual representations.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ol style="list-style-type: none"> relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends. 	<p>2.1, 2.2, 2.3, 2.4, 2.6, 2.7, 2.8, 2.11, 2.13</p> <p>2.1, 2.2, 2.4, 2.6, 2.7, 2.8, 2.11, 2.12, 2.13</p> <p>2.11, 2.12, 2.13</p> <p>2.11</p> <p>2.1, 2.2, 2.3, 2.4, 2.6, 2.7, 2.8, 2.11, 2.12, 2.13</p> <p>2.1, 2.2, 2.4, 2.6, 2.7, 2.8, 2.12, 2.13</p>	
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	<p>M:</p> <ol style="list-style-type: none"> 1. Recognize and explain the need for fixed units and tools for measuring length and weight; e.g., rulers and balance scales. 2. Tell time to the hour and half hour on digital and analog (dial) timepieces. 5. Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet. <p>PF & A:</p> <ol style="list-style-type: none"> 5. Describe orally and model a problem situation using words, objects or number phrase or sentence. <p>DA & P:</p> <ol style="list-style-type: none"> 2. Collect and organize data into charts using tally marks. 	<p>2.7</p> <p>2.5, 2.6, 2.13</p> <p>2.7</p> <p>2.13</p> <p>2.2, 2.3</p> <p>Diagnostic Assessments: Mathematics Screener Activities 1 and 4</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
3. Visual Patterns, Number Patterns and Counting	<p>NNS & O:</p> <ol style="list-style-type: none"> 1. Use ordinal numbers to order objects; e.g., first, second, third. 3. Read and write the numerals for numbers to 100. 4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100. 5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example: <ol style="list-style-type: none"> a. Develop a system to group and count by twos, fives and tens. b. Identify patterns and groupings in a 100's chart and relate to place value concepts. c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100. 6. Identify and state the value of a penny, nickel, dime, quarter and dollar. 7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters. 8. Show different combinations of coins that have the same value. 10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example: <ol style="list-style-type: none"> a. Model and explain addition using physical materials in contextual situations. b. Draw pictures to model addition. c. Write number sentences to represent addition. d. Explain that adding two whole numbers yields a larger whole number. 	<p>3.1</p> <p>3.3,3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14</p> <p>3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 3.9, 3.10, 3.11, 3.14</p> <p>3.1, 3.2, 3.3, 3.4, 3.5, 3.8, 3.9, 3.10, 3.11, 3.14</p> <p>3.2, 3.11, 3.12</p> <p>3.2, 3.11, 3.12</p> <p>3.2, 3.11, 3.12</p> <p>3.6, 3.7, 3.8, 3.9, 3.11, 3.12, 3.13, 3.14</p>	<p>4 Weeks (October – Beginning of November)</p> <ul style="list-style-type: none"> • 3.5 journal page 40 may need to be teacher directed by using guided practice. • 3.6 have individual number lines rather than use number line in back of journals.

	<p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>12. Use conventional symbols to represent the operations of addition and subtraction.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ol style="list-style-type: none"> relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends. <p>M:</p> <p>2. Tell time to the hour and half hour on digital and analog (dial) timepieces.</p> <p>G & SS:</p> <p>2. Create new shapes by combining or cutting apart existing shapes.</p>	<p>3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13</p> <p>3.6, 3.10, 3.11</p> <p>3.4, 3.6, 3.11, 3.13, 3.14</p> <p>3.4, 3.6, 3.10, 3.11, 3.13</p> <p>3.5</p> <p>3.4, 3.7</p>	
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	<p>PF & A:</p> <p>2. Extend sequences of sounds, shapes or simple number patterns, and create and record similar patterns. For example:</p> <p>a. Analyze and describe patterns with multiple attributes using numbers and shapes; e.g., AA, B, aa, b, AA, B, aa, b, ...</p> <p>b. Continue repeating and growing patterns with materials, pictures and geometric items; e.g., XO, XOO, XOOO, XOOOO.</p> <p>3. Describe orally the basic unit or general plan of a repeating or growing pattern.</p> <p>5. Describe orally and model a problem situation using words, objects or number phrase or sentence.</p> <p>DA & P:</p> <p>1. Identify multiple categories for sorting data.</p> <p>2. Collect and organize data into charts using tally marks.</p> <p>4. Read and interpret charts, picture graphs and bar graphs as sources of information to identify main ideas, draw conclusions, and make predictions.</p>	<p>3.1, 3.4, 3.5, 3.8, 3.11</p> <p>3.1, 3.5, 3.8, 3.11</p> <p>3.5, 3.6, 3.8, 3.11, 3.12</p> <p>3.13</p> <p>3.13</p> <p>3.13</p> <p>Diagnostic Assessments: Mathematics Screener Activities 5 and 8</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
4. Measurement and Basic Facts	<p>NNS & O:</p> <p>3. Read and write the numerals for numbers to 100.</p> <p>4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100.</p> <p>5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example:</p> <p>a. Develop a system to group and count by twos, fives and tens.</p> <p>b. Identify patterns and groupings in a 100's chart and relate to place value concepts.</p> <p>c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100.</p> <p>6. Identify and state the value of a penny, nickel, dime, quarter and dollar.</p> <p>7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters.</p> <p>8. Show different combinations of coins that have the same value.</p> <p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <p>a. Model and explain addition using physical materials in contextual situations.</p> <p>b. Draw pictures to model addition.</p> <p>c. Write number sentences to represent addition.</p> <p>d. Explain that adding two whole numbers yields a larger whole number.</p>	<p>4.1, 4.2, 4.6, 4.10</p> <p>4.1, 4.2, 4.10</p> <p>4.1, 4.2, 4.8, 4.10, 4.11, 4.12</p> <p>4.2, 4.8</p> <p>4.2, 4.4, 4.8, 4.10</p> <p>4.4, 4.10</p> <p>4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.9</p>	<p>4 Weeks (November)</p> <ul style="list-style-type: none"> • 4.2 teacher preference – (1) teach the Lesson “Measure Things with Fingers, Hands, Feet, and Arms.” • 4.4 requires rulers or cardboard – better than the cut out paper ones OR run a class set and laminate ahead of time. (2) ongoing learning activity “Time Match” not appropriate at this time because some clocks have times not yet introduced. • 4.8 use for optional enrichment (tell time to quarter hour).

	<p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ol style="list-style-type: none"> relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends. <p>M:</p> <ol style="list-style-type: none"> Recognize and explain the need for fixed units and tools for measuring length and weight; e.g., rulers and balance scales. Tell time to the hour and half hour on digital and analog (dial) timepieces. Order a sequence of events with respect to time; e.g., summer, fall, winter and spring; morning, afternoon and night. Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet. 	<p>4.3, 4.6, 4.7, 4.9</p> <p>4.1, 4.2, 4.5, 4.6, 4.7, 4.11, 4.12</p> <p>4.6</p> <p>4.2, 4.4, 4.5, 4.6</p> <p>4.4, 4.5, 4.8</p> <p>4.9</p> <p>4.2, 4.4, 4.5, 4.6, 4.7</p>	
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	<p>G & SS:</p> <ol style="list-style-type: none"> 1. Identify, compare and sort two-dimensional shapes; i.e., square, circle, ellipse, triangle, rectangle, rhombus, trapezoid, parallelogram, pentagon and hexagon. For example: <ol style="list-style-type: none"> a. Recognize and identify triangles and rhombuses independent of position, shape or size; b. Describe two-dimensional shapes using attributes such as number of sides and number of vertices (corners or angles). <p>PF & A:</p> <ol style="list-style-type: none"> 5. Describe orally and model a problem situation using words, objects or number phrase or sentence. <p>DA & P:</p> <ol style="list-style-type: none"> 1. Identify multiple categories for sorting data. 3. Display data in picture graphs with units of 1 and bar graphs with intervals of 1. 4. Read and interpret charts, picture graphs and bar graphs as sources of information to identify main ideas, draw conclusions, and make predictions. 	<p>4.7</p> <p>4.6, 4.7</p> <p>4.7</p> <p>4.7</p> <p>4.7</p> <p>Diagnostic Assessments: Mathematics Screener Activities 3 and 6</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
5. Place Value, Number Stories, and Basic Facts	<p>NNS & O:</p> <ol style="list-style-type: none"> 1. Use ordinal numbers to order objects; e.g., first, second, third. 2. Recognize and generate equivalent forms for the same number using physical models, words and number expressions; e.g., concept of ten is described by “10 blocks,” full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age. 3. Read and write the numerals for numbers to 100. 4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100. 5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example: <ol style="list-style-type: none"> a. Develop a system to group and count by twos, fives and tens. b. Identify patterns and groupings in a 100’s chart and relate to place value concepts. c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100. 6. Identify and state the value of a penny, nickel, dime, quarter and dollar. 7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters. 8. Show different combinations of coins that have the same value. 	<p>5.11</p> <p>5.1</p> <p>5.6, 5.8</p> <p>5.2, 5.6, 5.8</p> <p>5.1, 5.2, 5.3, 5.4, 5.6, 5.8, 5.9, 5.12)</p> <p>5.4, 5.7, 5.13</p> <p>5.2, 5.4, 5.7, 5.13</p> <p>5.13</p>	<p>4 Weeks (December)</p> <ul style="list-style-type: none"> • 5.1 and 5.2 copy and laminate place value mats that are in the journal. • 5.8 make up your own cards or overheads for the teaching tools in change to “less,” “more,” etc.

	<p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ol style="list-style-type: none"> Model and explain addition using physical materials in contextual situations. Draw pictures to model addition. Write number sentences to represent addition. Explain that adding two whole numbers yields a larger whole number. <p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>12. Use conventional symbols to represent the operations of addition and subtraction.</p> <p>15. Demonstrate that equal means “the same as” using visual representations.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ol style="list-style-type: none"> relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends. 	<p>5.1, 5.5, 5.7, 5.8, 5.10, 5.12, 5.13</p> <p>5.1, 5.5, 5.7, 5.8, 5.12, 5.13</p> <p>5.3, 5.6, 5.8</p> <p>5.4, 5.5</p> <p>5.2, 5.9, 5.10, 5.11, 5.12, 5.13</p> <p>5.12, 5.13</p>	
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	<p>M:</p> <ol style="list-style-type: none"> 1. Recognize and explain the need for fixed units and tools for measuring length and weight; e.g., rulers and balance scales. 2. Tell time to the hour and half hour on digital and analog (dial) timepieces. 4. Estimate and measure weight using non-standard units; e.g., blocks of uniform size. 5. Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet. <p>PF & A:</p> <ol style="list-style-type: none"> 2. Extend sequences of sounds, shapes or simple number patterns, and create and record similar patterns. For example: <ol style="list-style-type: none"> a. Analyze and describe patterns with multiple attributes using numbers and shapes; e.g., AA, B, aa, b, AA, B, aa, b, ... b. Continue repeating and growing patterns with materials, pictures and geometric items; e.g., XO, XOO, XOOO, XOOOO. 4. Solve open sentences by representing an expression in more than one way using the commutative property; e.g., $4 + 5 = 5 + 4$ or the number of blue balls plus red balls is the same as the number of red balls plus blue balls ($R + B = B + R$). 5. Describe orally and model a problem situation using words, objects or number phrase or sentence. <p>DA & P:</p> <ol style="list-style-type: none"> 6. Arrange five objects by an attribute, such as size or weight, and identify the ordinal position of each object. 	<p>5.11</p> <p>5.1</p> <p>5.4</p> <p>5.11</p> <p>5.11</p> <p>5.2</p> <p>5.12, 5.13</p> <p>5.6</p> <p>Diagnostic Assessments: Mathematics Screener Activity 2</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
6. Developing Fact Power	<p>NNS & O:</p> <p>2. Recognize and generate equivalent forms for the same number using physical models, words and number expressions; e.g., concept of ten is described by “10 blocks,” full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age.</p> <p>3. Read and write the numerals for numbers to 100.</p> <p>4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100.</p> <p>5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example:</p> <p>a. Develop a system to group and count by twos, fives and tens.</p> <p>b. Identify patterns and groupings in a 100’s chart and relate to place value concepts.</p> <p>c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100.</p> <p>6. Identify and state the value of a penny, nickel, dime, quarter and dollar.</p> <p>7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters.</p> <p>8. Show different combinations of coins that have the same value.</p> <p>9. Represent commonly used fractions using words and physical models for halves, thirds and fourths, recognizing fractions are represented by equal size parts of a whole and of a set of objects.</p>	<p>6.2</p> <p>6.2, 6.6</p> <p>6.2, 6.6</p> <p>6.4, 6.5, 6.6, 6.7, 6.9, 6.10</p> <p>6.8, 6.9, 6.12</p> <p>6.8, 6.9, 6.12</p> <p>6.1, 6.9, 6.10, 6.12</p> <p>6.7</p>	<p>4 Weeks (January)</p> <ul style="list-style-type: none"> 6.10 introduce 5-minute interval marks on analog clock, for optional enrichment.

	<p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ol style="list-style-type: none"> Model and explain addition using physical materials in contextual situations. Draw pictures to model addition. Write number sentences to represent addition. Explain that adding two whole numbers yields a larger whole number. <p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>14. Model and represent division as sharing equally in contextual situations; e.g., sharing cookies.</p> <p>15. Demonstrate that equal means “the same as” using visual representations.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ol style="list-style-type: none"> relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends. 	<p>6.8, 6.10</p> <p>6.8, 6.10</p> <p>6.7</p> <p>6.2</p> <p>6.1, 6.3, 6.4, 6.5, 6.7, 6.11, 6.12</p> <p>6.1, 6.3, 6.4, 6.5</p>	
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	<p>M:</p> <ol style="list-style-type: none"> 1. Recognize and explain the need for fixed units and tools for measuring length and weight; e.g., rulers and balance scales. 2. Tell time to the hour and half hour on digital and analog (dial) timepieces. 5. Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet. <p>G & SS:</p> <ol style="list-style-type: none"> 1. Identify, compare and sort two-dimensional shapes; i.e., square, circle, ellipse, triangle, rectangle, rhombus, trapezoid, parallelogram, pentagon and hexagon. For example: <ol style="list-style-type: none"> a. Recognize and identify triangles and rhombuses independent of position, shape or size; b. Describe two-dimensional shapes using attributes such as number of sides and number of vertices (corners or angles). <p>PF & A:</p> <ol style="list-style-type: none"> 3. Describe orally the basic unit or general plan of a repeating or growing pattern. 4. Solve open sentences by representing an expression in more than one way using the commutative property; e.g., $4 + 5 = 5 + 4$ or the number of blue balls plus red balls is the same as the number of red balls plus blue balls ($R + B = B + R$). 5. Describe orally and model a problem situation using words, objects or number phrase or sentence. 	<p>6.6, 6.9</p> <p>6.8</p> <p>6.6, 6.9</p> <p>6.7</p> <p>6.8</p> <p>6.1</p> <p>6.8</p> <p>Diagnostic Assessments: Mathematics Screener Activity 9</p>	
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	<p>DA & P:</p> <ol style="list-style-type: none"> 1. Identify multiple categories for sorting data. 2. Collect and organize data into charts using tally marks. 3. Display data in picture graphs with units of 1 and bar graphs with intervals of 1. 4. Read and interpret charts, picture graphs and bar graphs as sources of information to identify main ideas, draw conclusions, and make predictions. 5. Construct a question that can be answered by using information from a graph. 7. Answer questions about the number of objects represented in a picture graph, bar graph or table graph; e.g., category with most, how many more in a category compared to another, how many altogether in two categories. 	<p>6.12</p> <p>6.12</p> <p>6.12</p> <p>6.12</p> <p>6.12</p> <p>6.12</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
7. Geometry and Attributes	<p>NNS & O:</p> <p>2. Recognize and generate equivalent forms for the same number using physical models, words and number expressions; e.g., concept of ten is described by “10 blocks,” full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age.</p> <p>5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example:</p> <p>a. Develop a system to group and count by twos, fives and tens.</p> <p>b. Identify patterns and groupings in a 100’s chart and relate to place value concepts.</p> <p>c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100.</p> <p>6. Identify and state the value of a penny, nickel, dime, quarter and dollar.</p> <p>7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters.</p> <p>8. Show different combinations of coins that have the same value.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <p>a. counting all;</p> <p>b. counting on;</p> <p>c. one more, two more;</p> <p>d. doubles;</p> <p>e. doubles plus or minus one;</p> <p>f. make ten;</p> <p>g. using tens frames;</p> <p>h. identity property (adding zero).</p>	<p>7.5</p> <p>7.4, 7.5, 7.6</p> <p>7.4</p> <p>7.1, 7.4</p> <p>7.1, 7.4</p> <p>7.2</p>	<p>2-3 Weeks (February)</p> <ul style="list-style-type: none"> 7.4 could be used as an optional enrichment activity.

	<p>M:</p> <ol style="list-style-type: none"> 1. Recognize and explain the need for fixed units and tools for measuring length and weight; e.g., rulers and balance scales. 2. Tell time to the hour and half hour on digital and analog (dial) timepieces. 5. Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet. <p>G & SS:</p> <ol style="list-style-type: none"> 1. Identify, compare and sort two-dimensional shapes; i.e., square, circle, ellipse, triangle, rectangle, rhombus, trapezoid, parallelogram, pentagon and hexagon. For example: <ol style="list-style-type: none"> a. Recognize and identify triangles and rhombuses independent of position, shape or size; b. Describe two-dimensional shapes using attributes such as number of sides and number of vertices (corners or angles). 2. Create new shapes by combining or cutting apart existing shapes. 3. Identify the shapes of the faces of three-dimensional objects. 5. Copy figures and draw simple two-dimensional shapes from memory. <p>PF & A:</p> <ol style="list-style-type: none"> 1. Sort, classify and order objects by two or more attributes, such as color and shape, and explain how objects were sorted. <p>DA & P:</p> <ol style="list-style-type: none"> 1. Identify multiple categories for sorting data. 2. Collect and organize data into charts using tally marks. 3. Display data in picture graphs with units of 1 and bar graphs with intervals of 1. 4. Read and interpret charts, picture graphs and bar graphs as sources of information to identify main ideas, draw conclusions, and make predictions. 5. Construct a question that can be answered by using information from a graph. 6. Arrange five objects by an attribute, such as size or weight, and identify the ordinal position of each object. 	<p>7.3</p> <p>7.3</p> <p>7.3</p> <p>7.1, 7.3, 7.4, 7.7</p> <p>7.6</p> <p>7.5, 7.6</p> <p>7.4, 7.6</p> <p>7.1, 7.2</p> <p>7.1, 7.2</p> <p>7.4</p> <p>7.4</p> <p>7.4</p> <p>7.4</p> <p>7.1, 7.2</p> <p>Diagnostic Assessments: Mathematics Screener Activity 7</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
8. Mental Arithmetic, Money, and Fractions	<p>NNS & O:</p> <p>2. Recognize and generate equivalent forms for the same number using physical models, words and number expressions; e.g., concept of ten is described by “10 blocks,” full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age.</p> <p>3. Read and write the numerals for numbers to 100.</p> <p>4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100.</p> <p>5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example:</p> <p>a. Develop a system to group and count by twos, fives and tens.</p> <p>b. Identify patterns and groupings in a 100’s chart and relate to place value concepts.</p> <p>c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100.</p> <p>6. Identify and state the value of a penny, nickel, dime, quarter and dollar.</p> <p>7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters.</p> <p>8. Show different combinations of coins that have the same value.</p> <p>9. Represent commonly used fractions using words and physical models for halves, thirds and fourths, recognizing fractions are represented by equal size parts of a hole and of a set of objects.</p>	<p>8.4, 8.7</p> <p>8.3, 8.5</p> <p>8.5</p> <p>8.3, 8.4, 8.5</p> <p>8.1, 8.2, 8.4, 8.6</p> <p>8.1, 8.2, 8.4, 8.6, 8.7</p> <p>8.1, 8.2, 8.4, 8.6</p> <p>8.6, 8.7, 8.8, 8.9</p>	<p>4 Weeks (Late February)</p> <ul style="list-style-type: none"> • 8.2 using Money and Notation and Vocabulary – could be used as an optional enrichment activity. • 8.3 copy and laminate place value mats that are in the journal. • 8.5 making change could be used as an optional enrichment activity.

	<p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ol style="list-style-type: none"> Model and explain addition using physical materials in contextual situations. Draw pictures to model addition. Write number sentences to represent addition. Explain that adding two whole numbers yields a larger whole number. <p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ol style="list-style-type: none"> Model and explain subtraction using physical materials in contextual situations. Draw pictures to model subtraction. Write number sentences to represent subtraction. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>12. Use conventional symbols to represent the operations of addition and subtraction.</p> <p>13. Model and represent multiplication as repeated addition and rectangular arrays in contextual situations; e.g., four people will be at my party and if I want to give 3 balloons to each person, how many balloons will I need to buy?</p> <p>14. Model and represent division as sharing equally in contextual situations; e.g., sharing cookies.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). 	<p>8.4, 8.6</p> <p>8.4, 8.6</p> <p>8.4</p> <p>8.4</p> <p>8.6, 8.7, 8.8</p> <p>8.4, 8.8, 8.9</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
9. Place Value and Fractions	<p>NNS & O:</p> <p>2. Recognize and generate equivalent forms for the same number using physical models, words and number expressions; e.g., concept of ten is described by “10 blocks,” full tens frame, numeral 10, $5 + 5$, $15 - 5$, one less than 11, my brother’s age.</p> <p>5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example:</p> <p>a. Develop a system to group and count by twos, fives and tens.</p> <p>b. Identify patterns and groupings in a 100’s chart and relate to place value concepts.</p> <p>c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100.</p> <p>6. Identify and state the value of a penny, nickel, dime, quarter and dollar.</p> <p>7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters.</p> <p>8. Show different combinations of coins that have the same value.</p> <p>9. Represent commonly used fractions using words and physical models for halves, thirds and fourths, recognizing fractions are represented by equal size parts of a hole and of a set of objects.</p>	<p>9.3</p> <p>9.1, 9.2, 9.7</p> <p>9.7, 9.8</p> <p>9.7</p> <p>9.7, 9.8</p> <p>9.6, 9.7, 9.8</p>	<p>4 Weeks (March – April)</p> <ul style="list-style-type: none"> 9.1 have individual number lines rather than use number line in back of journals.

	<p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ul style="list-style-type: none"> a. Model and explain addition using physical materials in contextual situations. b. Draw pictures to model addition. c. Write number sentences to represent addition. d. Explain that adding two whole numbers yields a larger whole number. <p>11. Model, represent and explain subtraction as take-away and comparison. For example:</p> <ul style="list-style-type: none"> a. Model and explain subtraction using physical materials in contextual situations. b. Draw pictures to model subtraction. c. Write number sentences to represent subtraction. d. Explain that subtraction of whole numbers yields an answer smaller than the original number. <p>12. Use conventional symbols to represent the operations of addition and subtraction.</p> <p>14. Model and represent division as sharing equally in contextual situations; e.g., sharing cookies.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ul style="list-style-type: none"> a. counting all; b. counting on; c. one more, two more; d. doubles; e. doubles plus or minus one; f. make ten; g. using tens frames; h. identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ul style="list-style-type: none"> a. relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); b. one less, two less; c. all but one (for example, $8 - 7$, $5 - 4$); d. using tens frames; e. missing addends. 	<p>9.3</p> <p>9.3</p> <p>9.4</p> <p>9.6</p> <p>5.1, 5.2</p> <p>5.2</p>	
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	<p>PF & A:</p> <p>2. Extend sequences of sounds, shapes or simple number patterns, and create and record similar patterns. For example:</p> <p>a. Analyze and describe patterns with multiple attributes using numbers and shapes; e.g., AA, B, aa, b, AA, B, aa, b,...</p> <p>b. Continue repeating and growing patterns with materials, pictures and geometric items; e.g., XO, XOO, XOOO, XOOOO.</p> <p>3. Describe orally the basic unit or general plan of a repeating or growing pattern.</p> <p>5. Describe orally and model a problem situation using words, objects or number phrase or sentence.</p>	<p>9.7</p> <p>9.7</p> <p>9.7</p>	
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Unit # Title of <u>Everyday</u> <u>Mathematics</u>	Content Standards Grade Level Indicators	Lesson Planning and Assessment	# of Weeks Modifications Teachers Suggestions
10. Year End Review and Assessment	<p>NNS & O:</p> <p>3. Read and write the numerals for numbers to 100.</p> <p>4. Count forward to 100, count backwards from 100, and count forward or backward starting at any number between 1 and 100.</p> <p>5. Use place value concepts to represent whole numbers using numerals, words, expanded notation and physical models with ones and tens. For example:</p> <p>a. Develop a system to group and count by twos, fives and tens.</p> <p>b. Identify patterns and groupings in a 100's chart and relate to place value concepts.</p> <p>c. Recognize the first digit of a two-digit number as the most important to indicate size of a number and the nearness to 10 or 100.</p> <p>6. Identify and state the value of a penny, nickel, dime, quarter and dollar.</p> <p>7. Determine the value of a small collection of coins (with a total value up to one dollar) using 1 or 2 different type of coins, including pennies, nickels, dimes and quarters.</p> <p>8. Show different combinations of coins that have the same value.</p> <p>9. Represent commonly used fractions using words and physical models for halves, thirds and fourths, recognizing fractions are represented by equal size parts of a hole and of a set of objects.</p>	<p>10.7</p> <p>10.4, 10.6, 10.7</p> <p>10.4, 10.6, 10.7</p> <p>10.2</p> <p>10.2</p> <p>10.2, 10.3</p> <p>10.7</p>	<p>2 Weeks (May)</p> <ul style="list-style-type: none"> •

	<p>10. Model, represent and explain addition as combining sets (part + part = whole) and counting on. For example:</p> <ol style="list-style-type: none"> Model and explain addition using physical materials in contextual situations. Draw pictures to model addition. Write number sentences to represent addition. Explain that adding two whole numbers yields a larger whole number. <p>14. Model and represent division as sharing equally in contextual situations; e.g., sharing cookies.</p> <p>16. Develop strategies for basic addition facts, such as:</p> <ol style="list-style-type: none"> counting all; counting on; one more, two more; doubles; doubles plus or minus one; make ten; using tens frames; identity property (adding zero). <p>17. Develop strategies for basic subtraction facts, such as:</p> <ol style="list-style-type: none"> relating to addition (for example, think of $7 - 3 = ?$ as “3 plus ? equals 7”); one less, two less; all but one (for example, $8 - 7$, $5 - 4$); using tens frames; missing addends. <p>M:</p> <ol style="list-style-type: none"> Recognize and explain the need for fixed units and tools for measuring length and weight; e.g., rulers and balance scales. Tell time to the hour and half hour on digital and analog (dial) timepieces. Estimate and measure lengths using non-standard and standard units; i.e., centimeters, inches and feet. 	<p>10.4</p> <p>10.7</p> <p>10.2, 10.4, 10.6</p> <p>10.2, 10.6</p> <p>10.1</p> <p>10.2</p> <p>10.1</p>	
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