

**Correlations of the TEN UNDERSTANDING MATHEMATICS Programs**  
**By Neufeld Learning Systems**  
**February 2004**

**Note: a. The Understanding Math series of programs consist of 10 programs written for Kindergarten to 10<sup>th</sup> Grade.**

**The 10 programs are:**

Understanding Fractions	Understanding Integers	Understanding Probability
Understanding Percent	Understanding Exponents	Understanding Equations
Understanding Algebra	Understanding Graphing	Understanding Numeration
Understanding Measurement and Geometry		

**Note: b. The Understanding Numeration** software for K to 3 is set up so that the teacher selects items in the following order:

Concept .. from 5 concepts .. Counting, Comparing & Ordering, Place Value, Operations and Problem Solving.

Skill .. chosen from the list of specific learning expectations

Level .. indicates the levels of development for Kindergarten to 3<sup>rd</sup> grade.

Level	Upper Range of Number
<b>A</b>	<b>10</b>
<b>B</b>	<b>20</b>
<b>C</b>	<b>100</b>
<b>D</b>	<b>1000</b>

Lesson .. 250 lessons are sequenced to build understanding of concepts.

A detailed Lesson Synopsis on the website [www.neufeldmath.com](http://www.neufeldmath.com) to assist the teacher by stating the lesson contents but also by giving lesson suggestions.

Worksheet .. off computer worksheets are selected from the CD by a code.

**Note: c. The remaining 9 Understanding Math** programs for 4<sup>th</sup> to 10<sup>th</sup> grade are set up so that they can be used in a variety of teaching and learning environments ranging from a teacher centered approach with 1 computer to a student centered lab approach. The lessons can also be used in remediation, tutorial, intervention, resource, fast-tracking.

Each topic has:

- ..an interactive concept introduction, usually with a variety of graphic approaches.
- ..a number of particular examples
- ..practice questions with random questions but particular feedback
- ..a topic test with random questions and tracking
- ..off computer worksheets selected from the website .. [www.neufeldmath.com](http://www.neufeldmath.com)

## **Kindergarten**

By the end of kindergarten, students understand small numbers, quantities, and simple shapes in their everyday environment. They count, compare, describe and sort objects, and develop a sense of properties and patterns. Students have begun to understand measurement and concepts of time through the direct comparison of objects and experiencing a daily schedule.

## **Numbers and Operations**

The student will correctly represent the number and order of objects using numbers and through concrete activities, understand the concept of number.

### **MKN1. The student will connect numerals, cardinal numbers, and models to the quantities they represent.**

- a. Count, recognize, represent, name, and order a number of objects (up to 30).  
**NUM / COUNTING / Reading and Printing Numerals / A** / Introduction: Counting 1 to 10; Things in a Square #1; Join up to 10 Dots; Building a Numberline; Building a Vertical Numberline  
**NUM / COUNTING / Reading and Printing Numerals / B** / Introduction: Counting 1-20; Things in a Square #2; Join up to 20 Dots
- b. Verbally say the numbers in sequence up to 100 with an emphasis on pattern.  
**NUM / COUNTING / Reading and Printing Numerals / C** / Counting 0 to 100 on a Grid
- c. Write numerals through 20.  
**NUM / COUNTING / Reading and Printing Numerals / B** / Introduction: Counting 1-20; Things in a Square #2; Join up to 20 Dots
- d. Compare two or more sets of objects (1-10) and identify which set is equal to, more than, or less than the other despite distracting appearances.  
**NUM / COMPARING AND ORDERING / Introduce “Greater Than” “Less Than” / A** / Greater Than; Less Than; “Greater Than, Less Than #1”; “Greater Than, Less Than, Equal To”
- e. Sequence and identify using ordinal numbers (1<sup>st</sup> -10<sup>th</sup>).  
**NUM / COMPARING AND ORDERING / Use Ordinal Numbers / A** / Ordering Ladybugs
- f. Produce visual patterns and models for number words through “ten”.
- g. Estimate quantities fewer than or equal to 10.  
**NUM / COUNTING / Estimating the Number of Objects and Reasonableness / B** / Estimating and Counting
- h. Use informal strategies to share objects equally (divide) between two to three people.
- i. Make fair trades involving combinations of pennies and nickels or pennies and dimes.
- j. Count out and trade pennies to buy items that together cost less than 30 cents.  
**NUM / COUNTING / Counting Using Money / B** / Pennies, Nickels, Dimes; Coins – Count by 10s, 5s, and 1s

**MKN2. The student will use a variety of representations to model addition and subtraction.**

a. Use counting strategies to find how many items in two collections together.

**NUM / OPERATIONS / Introduce Addition...Concretely... “in all” & “altogether” / A /**  
Addition Using Gumballs #1; Addition Using Beans #1

**NUM / OPERATIONS / Introduce Addition...Concretely... “and” / A /** Addition Using Gumballs #2; Addition Using Beans #2

**NUM / OPERATIONS / Introduce the Symbolism... # + # = # / A /** Addition Using Gumballs #3; Addition Using Beans #3

**NUM / OPERATIONS / Introduce the Words... “plus” and “equals” / A /** Addition Using Gumballs #4; Addition Using Beans #4

b. Build number partners up to 10 (e.g., 4 and 1, 2 and 3, 3 and 2, 4 and 1 for five) and for doubles to 10 (3 and 3 for six).

**NUM / OPERATIONS / Demonstrate Addition Facts...Making 5 / A /** Ways to Make 5; Ways to Make 5 – Reverse Order; Ways to Make 5 – Vertical; Make 5 : Horizontal & Vertical

**NUM / OPERATIONS / Demonstrate Addition Facts...Making 6 / A /** Ways to Make 6; Ways to Make 6 – Reverse Order; Ways to Make 6 – Vertical; Make 6 : Horizontal & Vertical

**NUM / OPERATIONS / Demonstrate Addition Facts...Making 7 / A /** Ways to Make 7; Ways to Make 7 – Reverse Order; Ways to Make 7 – Vertical; Make 7 : Horizontal & Vertical

**NUM / OPERATIONS / Demonstrate Addition Facts...Making 8 / A /** Ways to Make 8; Ways to Make 8 – Reverse Order

**NUM / OPERATIONS / Demonstrate Addition Facts...Making 9 / A /** Ways to Make 9; Ways to Make 9 – Reverse Order

**NUM / OPERATIONS / Demonstrate Addition Facts...Making 10 / A /** Ways to Make 10; Ways to Make 10 – Reverse Order

c. Using objects, pictures, numbers, or words, create and solve story for five) and for doubles to 10 (3 and 3 for six).

**NUM / OPERATIONS / Fact Families...Add & Subtract / A /** Doubles – Add and Subtract

**MKN3. The student will model, act out, or use pictures to explain solutions.**

**Measurement**

The student will explore quantitative situations involving distance, length, area, volume, weight, time, and temperature.

**MKM1. The student will, as a class or small group, pose information questions, collect data, and record results using objects, pictures, and picture graphs.**

**MKM2. The student will compare and/or order objects on the basis of quantitative attributes (length, height, area, volume, and weight,) through direct comparison.**

**MKM3. The student will understand the measurement of calendar time by knowing the days of the week, months of the year, four seasons, and the days of the months by making records of each school day (e.g., Today is Wednesday, September 23.), including which day (or month) comes just before or after a given day or month.**

**MKM4. The student will experience the passage of time as it relates to a daily schedule, order the events, and tell the time they naturally occur.**

NUM / COMPARING AND ORDERING / Understand Measurement of Time / B / The Clock - An Introduction

## **Geometry**

The student will understand the concepts of basic shapes and spatial relationships.

**MKG1. The student will observe concrete objects in the environment and represent the objects using basic shapes.**

- a. Build, dramatize, draw and describe two-dimensional shapes informally and learn their names (triangles, rectangles, squares, and circles).
- b. Build, represent, and describe three-dimensional shapes informally and learn their names (spheres and cubes).
- c. Make pictures by putting shapes together.

**MKG2. The student will represent the positional relationships between objects using appropriate vocabulary such as up, down, above, below, inside, outside, first, last, behind, in front of, between, and through.**

**MKG3. The student will identify, create, and extend patterns.**

- a. Transfer patterns from one representation to another using actions, objects, and geometric shapes.

**MKG4. The student will compare and/or classify two-dimensional shapes, in any size or orientation, according to how they look.**

**MKG5. The student will complete simple spatial visualization tasks and puzzles.**

### **Terms/Symbols:**

numbers through 30; ordinal numbers (1<sup>st</sup> – 10<sup>th</sup>); comparison words—such as longer, shorter, heavier, lighter; morning, afternoon, evening, yesterday, today, tomorrow, days of the week, months of the year, seasons; triangle, rectangle, square, circle, sphere, cube; positional words—such as up, down, above, below, under, through; and more, less, equal.

NUM / COMPARING AND ORDERING / Use Ordinal Numbers / A / Ordering Ladybugs

NUM / COMPARING AND ORDERING / Introduce “Greater Than” “Less Than” / A / Greater Than; Less Than; “Greater Than, Less Than #1”; “Greater Than, Less Than, Equal To”

## **Grade 1**

By the end of grade one, students understand and use the concept of ones and tens in the place value number system. Students add and subtract small numbers with ease. They represent quantity with numbers, models, diagrams, and number sentences. They observe, construct, and decompose geometric shapes and solve simple problems including those involving spatial relationships.

## **Numbers and Operations**

The student will understand the concept of number and how to represent numbers, and to use addition and subtraction through activities beginning with concrete manipulation.

### **M1N1. The student will model, compare, order, and represent whole numbers up to 100.**

- a. Correctly count and represent the number of objects using numerals and cardinal numbers.

**NUM / COUNTING / Reading and Printing Numerals / B /** Introduction: Counting 1-20; Things in a Square #2; Join up to 20 Dots

**NUM / COUNTING / Reading and Printing Numerals / C /** Counting 0 to 100 on a Grid

- b. Sequence and identify using ordinal numbers (1<sup>st</sup> – 20<sup>th</sup>).

**NUM / COMPARING AND ORDERING / Use Ordinal Numbers / A /** Ordering Ladybugs

- c. Compare sets using terms of greater than, less than, and equal to (<, >, =).

**NUM / COMPARING AND ORDERING / Working with Whole Numbers <, >, = / A /** < and > on a Numberline #1; < and > on a Numberline #2; Make it True #1; Ordering...Vertical #1

**NUM / COMPARING AND ORDERING / Working with Whole Numbers <, >, = / B /** Make it True #2; “Greater Than, Less Than #2”; Ordering -Horizontal #2; Ordering- Vertical #2

- d. Represent physical models and objects with 2-digit numbers and understand the meaning of place value.

**NUM / PLACE VALUE / Break Numbers into Groups / B /** Making Groups

**NUM / PLACE VALUE / Break Numbers into Groups / C /** Break 12 into Groups; Break 15 into Groups; Break 27 into Groups; Breaking into Groups of 10; Groups of Items

**NUM / PLACE VALUE / Model Numbers Grouped in Packages / C /** Ones and Groups of Tens

- e. Understand the size and order of numbers by making a sequence and representing them on a number line.

**NUM / COMPARING AND ORDERING / Locate Numbers on a Number Line / A /** Find One Missing Number; Find Two Missing Numbers

**NUM / COMPARING AND ORDERING / Locate Whole Numbers on a Grid / C /** Numbers on a 0 to 100 Grid; Missing Numbers to 100

- f. Build number patterns using various representations and skip count forwards and backwards.

**NUM / COUNTING / Skip Counting and Patterns / C /** Patterns in Rows; Skip Counting to 100; Skip Count by 2s to 100; Next by 5s; Next by 2s

- g. Identify one more than, one less than, 10 more than, and 10 less than a given number.

- h. Determine which multiple of ten a given number is nearest (rounding) using tools such as a number line or hundreds chart in order to assist in estimating quantities up to 100.

- i. Use informal strategies to share objects equally (divide) between two to five people.

j. Make fair trades involving combinations of pennies, nickels, dimes, quarters, and half dollars and count out a combination needed to purchase items less than a dollar.  
NUM / COUNTING / Counting Using Money / D / Dollars

k. Make fair trades involving combinations of bills (\$1, \$5, \$10, \$20) and count out a combination needed to purchase item less than twenty dollars.

**M1N2. The student will understand and use inverse relationships of addition and subtraction.**

a. Use words, pictures and concrete models to interpret story problems and reflect the combining of sets as addition and taking away or comparing elements of sets as subtraction.

NUM / OPERATIONS / Demonstrate Addition Facts...Patterns / A / Bar Machine; Decomposition Tree #1; Adding Along the Numberline

NUM / OPERATIONS / Demonstrate Addition Facts...Patterns / B / Decomposition Tree #2

NUM / OPERATIONS / Demonstrate Addition Facts...Patterns / C / Decomposition Tree #3; Patterns in Addition

b. Understand addition and subtraction facts using strategies such as counting on, counting back, doubles, and making tens.

NUM / OPERATIONS / Addition Strategies / B / Tens and Doubles #2

NUM / OPERATIONS / Fact Families...Add & Subtract / B / Doubles – Add and Subtract; Fact Families

c. Acquire fluency with single-digit addition facts to 18 and corresponding subtraction facts.

NUM / OPERATIONS / Demonstrate Addition Facts...Making 5 / A / Ways to Make 5; Ways to Make 5 – Reverse Order; Ways to Make 5 – Vertical; Make 5 : Horizontal & Vertical

NUM / OPERATIONS / Demonstrate Addition Facts...Making 6 / A / Ways to Make 6; Ways to Make 6 – Reverse Order; Ways to Make 6 – Vertical; Make 6 : Horizontal & Vertical

NUM / OPERATIONS / Demonstrate Addition Facts...Making 7 / A / Ways to Make 7; Ways to Make 7 – Reverse Order; Ways to Make 7 – Vertical; Make 7 : Horizontal & Vertical

NUM / OPERATIONS / Demonstrate Addition Facts...Making 8 / A / Ways to Make 8; Ways to Make 8 – Reverse Order

NUM / OPERATIONS / Demonstrate Addition Facts...Making 9 / A / Ways to Make 9; Ways to Make 9 – Reverse Order

NUM / OPERATIONS / Demonstrate Addition Facts...Making 10 / A / Ways to Make 10; Ways to Make 10 – Reverse Order

NUM / OPERATIONS / Add 3 or 4 Numbers / B / Add 3 Numbers Vertically #2; Add 3 Numbers Horizontally #2; Add 3 Numbers – Chain Addition #2

NUM / OPERATIONS / Introduce Subtraction Symbolism / A / Introduce Vertical Subtraction; Subtraction Sentences

NUM / OPERATIONS / Fact Families...Add & Subtract / C / Check Subtraction by Addition

d. Decompose and represent numbers using models, diagrams and number sentences (“break numbers apart”, e.g., 8 represented as  $4 + 4$ ,  $5 + 2 + 1$ ,  $10 - 2$ ).

NUM / OPERATIONS / Demonstrate Addition Facts...Patterns / B / Decomposition Tree #2

NUM / OPERATIONS / Demonstrate Addition Facts...Patterns / C / Decomposition Tree #3; Patterns in Addition

e. Apply addition and subtraction to 2 digit numbers without regrouping (e.g.  $15 + 4$ ,  $80 - 60$ ,  $56 + 10$ ,  $100 - 30$ ,  $58 + 5$ ).

NUM / OPERATIONS / Add 2 Digit Numbers ... Concretely / C / Addition Without Regrouping

NUM / OPERATIONS / Add 2 Digit Numbers ... Abstractly / C / Addition Without Regrouping

NUM / OPERATIONS / Subtract 2 Digit Numbers...Concretely / C / Subtraction Without Regrouping

NUM / OPERATIONS / Subtract 2 Digit Numbers...Abstractly / C / Subtraction Without Regrouping

f. Create, model, and solve story problems that use addition, subtraction, and fair shares (between two to five people).

**M1N3. The student will count large collections of objects by dividing them into equal parts and represent the results using words, pictures, or diagrams.**

NUM / OPERATIONS / Introduce Multiplication Concretely / Grouping Eggs into Bowls; Grouping Chairs into Rows

### **Measurement**

The student will understand measurement of quantitative attributes through concrete activities.

**M1M1. The student will compare and/or order the length, weight, or volume of two or more objects by using direct comparison or a nonstandard unit.**

- Directly compare length, area, and volume through concrete activities.
- Estimate and measure using a non-standard unit that is smaller than the object to be measured and must be repeated end to end.
- Measure with a tool by creating a “ruled” stick, tape, or container by marking off ten segments of the repeated single unit.

**M1M2. The student will develop an understanding of the measurement of time.**

- Tell time to the nearest half hour and understand the movement of the minute hand and how it relates to the hour hand.

NUM / COMPARING AND ORDERING / Understand Measurement of Time / B / Times to the Hour; Times to the Half Hour

- Compare and/or order the sequence or duration of events (e.g., shorter/longer and before/after).

### **Geometry**

The student will understand the concepts of geometric shapes and spatial relationships through concrete activities.

**M1G1. The student will observe and construct various two and three-dimensional shapes and decompose them into more basic shapes (squares, circles, triangles, and rectangles).**

- Build, draw, name, and describe quadrilaterals, pentagons, and hexagons.
- Build, represent, name, and describe cylinders, cones, and rectangular prisms (objects that have the shape of a box).

c. Create pictures and designs using shapes, including overlapping shapes.

**M1G2. The student will compare, contrast, and/or classify geometric shapes by the common attributes of position, shape, size, number of sides, and number of corners and record and display data.**

**M1G3. The student will arrange and describe objects in space by proximity, position, and direction (near, far, below, above, up, down, behind, in front of, next to, and left or right of).**

**Terms/Symbols:**

place value—ones, tens, hundreds, greater than, less than, equal to, fewer than, more than, sum/add, difference/subtract, coins—penny, nickel, dime, quarter, half-dollar, compare/contrast, length, volume weight, estimate, hexagon, cylinder, cone, rectangular prism,  $<$ ,  $>$ ,  $=$

**NUM / PLACE VALUE / Identify Place Value Patterns / C /** Pictures to Numbers #1; Tens and Ones to Pictures #1; Numbers to Pictures #1

**NUM / PLACE VALUE / Identify Place Value Patterns (to 100) / C /** Picture to Numbers #2; Tens and Ones to Pictures #2; Numbers to Pictures #2; 2 Digit Numbers – Different Ways

**NUM / COUNTING / Counting Using Money / D /** Dollars

**NUM / COMPARING AND ORDERING / Working with Whole Numbers  $<$ ,  $>$ ,  $=$  / B /** Make it True #2; “Greater Than, Less Than #2”; Ordering -Horizontal #2; Ordering- Vertical #2

**Grade 2**

By the end of grade two, students understand place value and number relationships in addition and subtraction and they use simple concepts of multiplication. They measure length with appropriate units. They classify shapes and see relationships among them by recognizing their geometric attributes. They collect and analyze data and verify the results.

**Numbers and Operations**

The student will deepen their understanding of the concept of number and how to represent numbers. The student will understand and apply addition, subtraction and multiplication through concrete manipulation and perform basic calculations.

**M2N1. The student will understand the concept of number, how to represent and use numbers to 4-digits.**

a. Use a variety of models to build and understand place value (ones, tens, hundreds, thousands).

**NUM / PLACE VALUE / Identify Place Value Patterns (to 100) / C /** Picture to Numbers #2; Tens and Ones to Pictures #2; Numbers to Pictures #2; 2 Digit Numbers – Different Ways

**NUM / PLACE VALUE / Identify Place Value Patterns (to 1000) / D /** 3 Digit Numbers – Different Ways

b. Compose and decompose numbers.

**NUM / OPERATIONS / Demonstrate Addition Facts...Patterns / D /** Decomposition Tree #3

c. Understand the relative size of numbers through concrete activities using 10 as a unit or 100 as a unit.

d. Consider a number by regarding it as a sum, difference, or product (includes fact families).

e. Understand the concept of money as a system of exchange.

**NUM / COUNTING / Counting Using Money / D / Dollars**

f. Count back change and use decimal notation and the dollar and cent symbols to represent a collection of coins and currency.

**NUM / COUNTING / Introduce Decimals / D / Tenth and Decimals; Ones and Tenths**

g. Represent data, using objects, tallies, tables, or bar graphs and interpret the data.

h. Build and extend growing patterns using representations of number.

**M2N2. The student will build fluency with multi-digit addition and subtraction by developing multiple strategies and checking results against estimations.**

a. Understand the mutual relation between addition and subtraction.

**NUM / OPERATIONS / Fact Families...Add & Subtract / B / Doubles – Add and Subtract; Fact Families**

**NUM / OPERATIONS / Fact Families...Add & Subtract / C / Check Subtraction by Addition**

b. Apply knowledge of basic facts to addition and subtraction of 2- and 3-digit numbers to include regrouping.

**NUM / OPERATIONS / Add 2 Digit Numbers ... Concretely / C / Addition Without Regrouping; Addition With Regrouping**

**NUM / OPERATIONS / Add 2 Digit Numbers ... Abstractly / C / Addition Without Regrouping; Addition With Regrouping**

**NUM / OPERATIONS / Subtract 2 Digit Numbers...Concretely / C / Subtraction Without Regrouping; Subtraction With Regrouping**

**NUM / OPERATIONS / Subtract 2 Digit Numbers...Abstractly / C / Subtraction Without Regrouping; Subtraction With Regrouping**

**NUM / OPERATIONS / Add 3 Digit Numbers...Concretely / D / Addition Without Regrouping; Addition With Regrouping**

**NUM / OPERATIONS / Add 3 Digit Numbers...Abstractly / D / Addition Without Regrouping; Addition With Regrouping**

**NUM / OPERATIONS / Subtract 3 Digit Numbers...Concretely / D / Subtraction Without Regrouping; Subtraction With Regrouping**

**NUM / OPERATIONS / Subtract 3 Digit Numbers...Abstractly / D / Subtraction Without Regrouping; Subtraction With Regrouping**

c. Know the concept of simple properties of addition (commutative, associative, and identity) and subtraction (identity) and use them to check results (include the use of boxes or \_\_\_ to represent a missing value and parentheses in expressions).

**M2N3. The student will understand the meaning of and apply multiplication.**

a. Interpret problem solving situations where multiplication may be applied and represent them using mathematical expressions.

**NUM / OPERATIONS / Introduce Multiplication Concretely / C / Eggs in Bowls – Introduce X; Chairs and Rows – Introduce X**

**NUM / OPERATIONS / Introduce Multiplication Sentences / C / Multiplication Sentences #1, #2**

b. Understand multiplication as repeated addition.

**NUM / OPERATIONS / Introduce Multiplication Concretely / C / Multiplication – Repeated Addition**

c. Know the concept of the commutative property of multiplication and use it to check results.

**NUM / OPERATIONS / Demonstrate Commutative Property / C / Multiplication – any Order**

d. Use repeated addition, arrays, and counting by multiples to correctly multiply 1-digit numbers.

**NUM / OPERATIONS / Introduce Multiplication Facts...2,3,4,5 / C / Multiplication: Groups of 2; Multiplication: Groups of 3 ; Multiplication: Groups of 4 ; Multiplication: Groups of 5**

**NUM / OPERATIONS / Introduce Multiplication by 1 and by 0 / C / Multiplication: Groups of 1; Multiplication: Groups of 0**

**NUM / OPERATIONS / Introduce Multiplication Facts...6,7,8,9 / C / Multiplication: Groups of 6; Multiplication: Groups of 7; Multiplication: Groups of 8; Multiplication: Groups of 9**

**NUM / OPERATIONS / Introduction to Arrays / C / Introduction to Array; Build Arrays; Introduce Arrays with Multiplication; Build Arrays with Multiplication**

e. Know about the multiplication table.

**NUM / OPERATIONS / Patterns in Multiplications / C / X Table – Groups of 2; X Table – Groups of 3; X Table – Groups of 4; X Table – Groups of 5; X Table – Groups of 6; X Table – Groups of 7; X Table – Groups of 8; X Table – Groups of 9; X Table – Groups of 10**

f. Use repeated subtraction, equal sharing, and forming equal groups with remainders to divide collections of objects.

**NUM / OPERATIONS / Introduction to Division / C / Equal Groups of Eggs; Sharing Oranges Equally; Division Introduction – Eggs; Division Introduction – Oranges; Division Introduction – How Many Groups?**

**M2N4. The student will represent and interpret quantities and relationships using mathematical expressions including equality and inequality signs.**

**Measurement**

The student will understand measurement of the quantitative attributes of length, time, and temperature.

**M2M1. The student will understand the standard units of inch, foot, yard, centimeter, and meter and measure length to the nearest inch or centimeter.**

a. Compare the relationship of one unit to another by measuring an object with different units.

b. Determine and describe the perimeter of polygons by measuring the length of the sides.

c. Estimate, and then measure, to determine if estimations were reasonable.

**M2M2. The student will tell time to the nearest five minutes and know relationships of time such as the number of minutes in an hour, days in a month, and weeks in a year.**

NUM / COMPARING AND ORDERING / Understand Measurement of Time / C / Times to Five Minutes

**M2M3. The student will estimate, then measure, temperature (Fahrenheit) and determine if estimations were reasonable.**

### **Geometry**

The student will understand the concepts of geometric shapes and the elements that compose them.

**M2G1. The student will describe and classify previously learned plane figures (circles, triangles, square, rectangle, trapezoid, quadrilateral, pentagon, hexagon, and irregular shapes) according to the number and shape of vertices, edges, and angles (right angle, more than a right angle, less than a right angle).**

**M2G2. The student will describe and classify previously learned solid geometric shapes (prisms, cylinders, cones, and spheres) according to the number and shape of faces, edges, vertices, and angles (right angle, more than a right angle, less than a right angle).**

a. Recognize the plane shape found on the face of a geometric solid.

**M2G3. The student will describe the change in attributes as two and three-dimensional shapes are cut and rearranged.**

#### **Terms/Symbols:**

place value—thousands, product, multiply, regroup, array, inch, foot, yard, centimeter, meter, quadrilateral, right angle, edge, face, vertex/vertices, prism, perimeter, plane,  $>$ ,  $<$ ,  $=$