

Correlation of the Understanding Numeration 2008© and the Understanding Numeration 2008© With the Bowman Primary Math Pacing Guide for Second Grade 2nd Quarter

The programs are designed for use in a variety of teaching and learning environments ranging from a teacher-centered approach with one computer to a student-centered lab approach. The lessons may also be used in remediation, tutorials, intervention, resource, and fast-tracking.

Organization of the Understanding Numeration 2008© Program

The Understanding Numeration 2008© program consists of the following five concepts:

Counting Operations Place Value Comparing and Ordering Problem Solving

Each concept in the program covers several skills. Every skill has up to four different levels of difficulty with corresponding lessons for each level. The lessons are sequenced to build an understanding of concepts. Each concept also has the following:

- 1) an interactive concept introduction, usually with a variety of graphic approaches;
- 2) a number of particular examples;
- 3) a skill test with random questions and tracking;
- 4) worksheets with visual demonstrations on how to complete each worksheet;
- 5) teaching strategies including Math Circles Overview, Flight Plan Overview, Flight Plan Roles, and Flight Plan
- 6) Navigation Sheet are found on our website (www.neufeldmath.com).

Organization of the Understanding Math 2008© Programs

The Understanding Math 2008© series of programs consists of the following nine programs written for fourth to tenth grade:

Understanding Whole Numbers and Integers
Understanding Measurement and Geometry
Understanding Fractions
Understanding Graphing
Understanding Percent

Understanding Equations
Understanding Probability
Understanding Algebra
Understanding Exponents

Each program contains several sections with several topics. Every topic has the following:

- 1) an interactive concept introduction, usually with a variety of graphic approaches;
- 2) a number of particular examples;
- 3) practice questions with random questions, but specific feedback;
- 4) a topic test with random questions and tracking;
- 5) on-line worksheets selected from our website (www.neufeldmath.com).

Teachers may also search for specific topics using our search engine at <http://www.corr.neufeldmath.com>.

Standards that are **not included** in the current Understanding Numeration 2008© programs are noted as *not yet correlated*.

Note:

1. Green indicates the GLI (Grade Level Indicators as outlined in the State Standards (see Mathematics_ACS.pdf)

N	Number, Number Sense and Operations Standard	M	Measurement Standard
G	Geometry and Spatial Sense Standard	P	Patterns, Functions and Algebra Standard
D	Data Analysis and Probability Standard		

2. The Understanding Math 2008 © and Understanding Numeration 2008 © correlations to the GLI's are in black
3. Correlations to the Focus of the Week are in light blue
4. Short forms.

INV	Investigations	TM	Teacher's Manual
SSN	Session	SM	Student book
*	denotes optional additions		

5. The Week location:

Week 1	Page 3	Week 4 & 5	Page 16	Week 8	Page 25
Week 2	Page 7	Week 6	Page 19	Week 9	Page 27
Week 3	Page 11	Week 7	Page 22	Week 10	Page 31



		<p>Understanding Whole Numbers and Integers 2008</p> <p>Section 1: The Meaning of Whole Numbers</p> <p>Seeing the Number</p> <p style="padding-left: 40px;">To Hundreds- Example 1</p> <p style="padding-left: 40px;">To Hundreds- Example 2</p> <p>Expanded Notation</p> <p style="padding-left: 40px;">To 999- Example 1</p> <p style="padding-left: 40px;">To 999- Example 2</p> <p>Represent Numbers in Many Ways</p> <p style="padding-left: 40px;">Example 2</p> <p style="padding-left: 40px;">Example 3</p> <p style="padding-left: 40px;">Example 4</p> <p><i>P1. Extend simple number patterns (both repeating and growing patterns), and create similar patterns using different objects, such as using physical materials or shapes to represent numerical patterns.</i></p> <p>Understanding Algebra 2008</p> <p>Section 3: Patterns, Patterns, Patterns</p> <p>Introduction... Math is Patterns</p> <p>Geometric Patterns</p> <p style="padding-left: 40px;">Example 1</p> <p style="padding-left: 40px;">Example 2</p> <p style="padding-left: 40px;">Example 3</p> <p style="padding-left: 40px;">Example 4</p> <p style="padding-left: 40px;">Example 5</p> <p>Number Patterns</p> <p style="padding-left: 40px;">Example 1</p> <p style="padding-left: 40px;">Example 2</p> <p style="padding-left: 40px;">Example 3</p> <p style="padding-left: 40px;">Example 4</p> <p>Number and Geometric Patterns</p> <p style="padding-left: 40px;">Example 1</p> <p style="padding-left: 40px;">Example 2</p>
--	--	--



		<p><i>P2. Use patterns to make generalizations and predictions; e.g., determine a missing element in a pattern.</i></p> <p>Understanding Numeration: Problem Solving</p> <p>Skill 2: Find a Pattern Level A,B,C,D 2) Toy Animals</p> <p>Skill 7: Birthday Party Level A,B,C,D 1) Birthday Party</p> <p>Skill 8: Brick Path Level A,B,C,D 1) Brick Path</p> <p>Understanding Algebra 2008</p> <p>Section 3: Patterns, Patterns, Patterns</p> <p>Number Patterns</p> <p style="padding-left: 40px;">Example 1</p> <p style="padding-left: 40px;">Example 2</p> <p style="padding-left: 40px;">Example 3</p> <p style="padding-left: 40px;">Example 4</p> <p>Number and Geometric Patterns</p> <p style="padding-left: 40px;">Example 1</p> <p style="padding-left: 40px;">Example 2</p> <p><i>P3. Create new patterns with consistent rules or plans, and describe the rule or general plan of existing patterns.</i></p> <p>Not yet correlated</p>
--	--	--



		<p>Note Week 1 Focus: Addition and Subtraction Strategies Review</p> <p>Addition</p> <p>Understanding Numeration: Operations</p> <p>Skill 5: Demonstrate Addition Facts... Making 5 Level A 1) Ways to Make 5 2) Ways to Make 5 - Reverse Order</p> <p>Skill 6: Demonstrate Addition Facts... Making 6 Level A 1) Ways to Make 6 2) Ways to Make 6 - Reverse Order</p> <p>Skill 7: Demonstrate Addition Facts... Making 7 Level A 1) Ways to Make 7 2) Ways to Make 7 - Reverse Order</p> <p>Skill 8: Demonstrate Addition Facts... Making 8 Level A 1) Ways to Make 8 2) Ways to Make 8 - Reverse Order Do Skill Test - 5 questions (randomly generated)</p> <p>Skill 9: Demonstrate Addition Facts... Making 9 Level A 1) Ways to Make 9 2) Ways to Make 9 - Reverse Order</p> <p>Skill 11: Demonstrate Addition Facts... Patterns Level A 1) Bar Machine 2) Decomposition Tree #1 Level B 1) Decomposition Tree #2 Level C 1) Decomposition Stack 2) Patterns in Addition Level D 1) Decomposition Tree #3</p> <p>Skill 13: Addition Strategies Level A 1) Tens and Doubles #1 Do Skill Test - 5 questions (randomly generated) Level B 1) Tens and Doubles #2 Do Skill Test - 5 questions (randomly generated) Level C 1) Darts - Add 3 or 4 Numbers Do Skill Test - 5 questions (randomly generated)</p>
--	--	---



			<p>Subtraction</p> <p>Understanding Numeration: Operations</p> <p>Skill 11: Demonstrate Addition Facts... Patterns Level C 1) Decomposition Stack</p> <p>Skill 18: Introduce Subtraction Concretely... "Take Away" Level A 1) Introduction to Subtraction #1 2) Introduction to Subtraction #2 Do Skill Test - 5 questions (randomly generated)</p> <p>Skill 19: Introduce Subtraction Concretely... # - # = # Level A 1) Introduction to Subtraction #3 2) Introduction to Subtraction #4 3) Introduce Vertical Subtraction Do Skill Test - 10 questions (randomly generated)</p> <p>Level C 1) Subtraction Sentences Do Skill Test - 5 questions (randomly generated)</p> <p>Skill 20: Fact Families... Add and Subtract Level A 3) Fact Families #1 Level B 2) Fact Families #2</p>
Week 2	<p>Focus: Pattern Rules</p> <p>Day 1: TM: * Parent explanation letter</p> <ul style="list-style-type: none"> Practice showing number patterns and writing "What is the pattern rule? Demonstrate how to use the same rule with unifix cubes, blocks, etc. <p>Day 2: Repeating Patterns</p> <p>Day 3: Increasing Patterns</p> <p>Day 4: Decreasing Patterns</p> <p>Day 5: Guess the Pattern Rule</p> <p>POW: 2nd Qtr #2 What is the pattern rule?</p>	<p>N1</p> <p>N6</p>	<p><i>N1a. Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example: a. Recognize 10 can mean "10 ones" or a single entity (1 ten) through physical models and trading games.</i></p> <p>Understanding Numeration: Place Value</p> <p>Skill 2: Model Numbers Grouped in Packages Level C 1) Ones and Groups of Ten Do Skill Test - 5 questions (randomly generated)</p>



	<p>Vocabulary: Increasing pattern Decreasing pattern</p> <p>*Send Money Poem bk. and Money Flip bk. to be copied.</p>	<p>Understanding Whole Numbers and Integers 2008 Section 1: The Meaning of Whole Numbers Seeing the Number To Tens- Example 1 To Tens- Example 2 Represent Numbers in Many Ways Example 1</p> <p><i>N1b. Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example: b. Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.</i></p> <p>Understanding Numeration: Place Value Skill 5: Identify Place Value Patterns (to 1000) Level D 1) Expanded Notation Do Skill Test - 5 questions (randomly generated)</p> <p>Understanding Whole Numbers and Integers 2008 Section 1: The Meaning of Whole Numbers Seeing the Number To Hundreds- Example 1 To Hundreds- Example 2 Expanded Notation To 999- Example 1 To 999- Example 2 Represent Numbers in Many Ways Example 2 Example 3 Example 4</p>
--	---	--



N6. Model, represent and explain subtraction as comparison, take-away and part-to-whole; e.g., solve missing addend problems by counting up or subtracting, such as "I had six baseball cards, my sister gave me more, and I now have ten. How many did she give me?" can be represented as $6 + ? = 10$ or $10 - 6 = ?$.

Understanding Numeration: Operations

Skill 11: Demonstrate Addition Facts... Patterns

Level C 1) Decomposition Stack

Skill 18: Introduce Subtraction Concretely... "Take Away"

Level A 1) Introduction to Subtraction #1

2) Introduction to Subtraction #2

Do Skill Test - 5 questions (randomly generated)

Skill 19: Introduce Subtraction Concretely... # - # = #

Level A 1) Introduction to Subtraction #3

2) Introduction to Subtraction #4

3) Introduce Vertical Subtraction

Do Skill Test - 10 questions (randomly generated)

Level C 1) Subtraction Sentences

Do Skill Test - 5 questions (randomly generated)

Skill 20: Fact Families... Add and Subtract

Level A 1) Doubles - Add and Subtract

2) Relate Addition and Subtraction

3) Fact Families #1

Do Skill Test - 10 questions (randomly generated)

Level B 1) Doubles - Add and Subtract

2) Fact Families #2

Do Skill Test - 5 questions (randomly generated)

Level C 1) Check Subtraction by Addition

Do Skill Test - 5 questions (randomly generated)

Understanding Numeration: Problem Solving

Skill 1: Draw a Picture

Level A,B,C,D 1) Eating Apples



		<p>Note Week 2 Focus: Pattern Rules</p> <p>Understanding Algebra 2008 Section 3: Patterns, Patterns, Patterns Introduction... Math is Patterns Geometric Patterns Example 1 Example 2 Example 3 Example 4 Example 5 Number Patterns Example 1 Example 2 Example 3 Example 4 Number and Geometric Patterns Example 1 Example 2</p> <p>Understanding Numeration: Counting Skill 8: Skip Counting and Patterns Level C 1) Patterns in Rows 2) Skip Counting to 100 3) Skip Count by 2s to 100 4) Next by 2s 5) Next by 5s Do Skill Test - 10 questions (randomly generated)</p> <p>Understanding Numeration: Operations Skill 11: Demonstrate Addition Facts... Patterns Level C 2) Patterns in Addition</p>
--	--	--



			<p>Understanding Numeration: Problem Solving Skill 2: Find a Pattern Level A,B,C,D 2) Toy Animals</p>
Week 3	<p>Focus: Money Day 1: TM: Coin Talk: Complete parts of the activity appropriate for your students. Review counting dimes, nickels and pennies in SM. using Touch Money. Day 2: TM: Coin Walk: Complete if your students still need practice in identifying coins and values. Review counting quarters, dimes, nickels and pennies in SM. Day 3: Money Flip Book Day 4: TM: * Writing The Value of Coins</p> <ul style="list-style-type: none"> • Penny-a-Pocket: INV. 4, SSN. 5 • Pennies, nickels, dimes R4-1, P 4-1 <p>Day 5: Quarters</p> <ul style="list-style-type: none"> • Play Get to a Quarter [Use coins and dice] • POW: 2nd Qtr #3 Cookie Bags TM: Equal Groups: to help teach POW 	<p>N3,4</p> <p>N5,8</p>	<p><i>N3. Count money and make change using coins and a dollar bill.</i></p> <p>Understanding Numeration: Counting Skill 7: Counting Using Money Level B 1) Pennies, Nickels, Dimes (USA/Canadian) 2) Coins - Count by 10s, 5s and 1s (USA/Canadian) Do Skill Test - 5 questions (randomly generated) Level C 1) Quarters (USA/Canadian) Do Skill Test - 5 questions (randomly generated) USA Level D 1) Dollars (USA/Canadian) Do Skill Test - 5 questions (randomly generated)</p> <p>Understanding Numeration: Problem Solving Skill 4: Make a Table Level A,B,C,D 2) Muffins</p> <p><i>N4. Represent and write the value of money using the ¢ sign and in decimal form when using the \$ sign.</i></p> <p>Understanding Numeration: Counting Skill 7: Counting Using Money Level B 1) Pennies, Nickels, Dimes (USA/Canadian) 2) Coins - Count by 10s, 5s and 1s (USA/Canadian) Do Skill Test - 5 questions (randomly generated) Level C 1) Quarters (USA/Canadian) Do Skill Test - 5 questions (randomly generated) USA</p>



		<p>Level D 1) Dollars (USA/Canadian) Do Skill Test - 5 questions (randomly generated)</p> <p><i>N5a. Represent fractions (halves, thirds, fourths, sixths and eighths), using words, numerals and physical models. For example: a. Recognize that a fractional part can mean different amounts depending on the original quantity.</i></p> <p>Understanding Numeration: Counting Skill 9: Introduce Fractions... Equal Parts Level B 1) Two Equal Parts 2) Three Equal Parts 3) Four Equal Parts Do Skill Test - 10 questions (randomly generated)</p> <p>Understanding Fractions 2008 Section 1: The Meaning of Fractions Introduction.. Think, Write, Say Circle Squares Examples Parts of a Fraction Part of a Whole One Half One Third One Quarter Parts of a Whole Three Eighths Write the Fraction Question 1 Question 2</p>
--	--	---



			<p>Question 3</p> <p>Question 4</p> <p>Fraction of a Gas Tank</p> <p>Fractions on a Number Line</p> <p>Halves</p> <p>Thirds</p> <p>Quarters</p> <p>Summary</p> <p>Pattern Blocks</p> <p>Example 1</p> <p>Example 2</p> <p>Example 3</p> <p>Example 4</p> <p>Fraction of a Pie</p> <p>Example 1</p> <p>Example 2</p> <p>Fractions of a Shape</p> <p>Fraction of a Square- One Half</p> <p>Fraction of a Square- One Quarter</p> <p>Fraction of a Square- One Eighth</p> <p>Fraction of a Square- Three Eighths</p> <p>Fraction of a Hexagon- One Sixth</p> <p>Fraction of a Hexagon- One Third</p> <p>Fraction of a Hexagon- One Half</p> <p>Fraction of a Hexagon- Two Thirds</p> <p>Fraction of a Hexagon- Five Sixths</p> <p>Fraction of a Octagon- One Eighth</p> <p>Fraction of a Octagon- One Quarter</p> <p>Fraction of a Octagon- One Half</p> <p>Fraction of a Octagon- Five Eighths</p> <p>Fraction of a Octagon- Three Fourths</p>
--	--	--	--



		<p>N5b. Represent fractions (halves, thirds, fourths, sixths and eighths), using words, numerals and physical models. For example: b. Recognize that a fractional part of a rectangle does not have to be shaded with contiguous parts.</p> <p><i>Not yet correlated</i></p> <p>N5c. Represent fractions (halves, thirds, fourths, sixths and eighths), using words, numerals and physical models. For example: c. Identify and illustrate parts of a whole and parts of sets of objects.</p> <p>Understanding Numeration: Counting</p> <p>Skill 10: Introduce Fractions... Part of a Whole</p> <p>Level B</p> <ol style="list-style-type: none"> 1) One Half 2) One Third 3) One Quarter <p>Do Skill Test - 10 questions (randomly generated)</p> <p>Skill 11: Introduce Common Fractions... Parts of a Whole</p> <p>Level B</p> <ol style="list-style-type: none"> 1) One Half of a Shape 2) Two Thirds of a Shape 3) Three Quarters of a Shape 4) Cut in Half 5) Fifths to Tenths #1 <p>Do Skill Test - 10 questions (randomly generated)</p> <p>Level C</p> <ol style="list-style-type: none"> 1) Fifths to Tenths #2 2) Write the Fraction #1 3) Write the Fraction #2 <p>Do Skill Test - 5 questions (randomly generated)</p> <p>Skill 12: Introduce Fraction of a Set</p> <p>Level C</p> <ol style="list-style-type: none"> 1) Fraction of a set <p>Do Skill Test - 10 questions (randomly generated)</p>
--	--	---



Understanding Fractions 2008

Section 1: The Meaning of Fractions

Introduction.. Think, Write, Say

Squares

Balls

Part of a Whole

One Half

One Third

One Quarter

Parts of a Whole

Three Eighths

Write the Fraction

Question 1

Question 2

Question 3

Question 4

*N5d. Represent fractions (halves, thirds, fourths, sixths and eighths), using words, numerals and physical models. For example: **d. Compare and order physical models of halves, thirds and fourths in relation to 0 and 1.***

Understanding Numeration: Comparing & Ordering

Skill 7: Compare Fractions

Level D 1) Compare Fractions

Do Skill Test - 5 questions (randomly generated)

Understanding Fractions 2008

Section 1: The Meaning of Fractions

Fraction Strips

Concept 1

Concept 2



			<p>Fractions on a Number Line</p> <p>Halves Thirds Quarters Summary</p> <p>N8. Model, represent and explain division as sharing equally and repeated subtraction.</p> <p>Understanding Numeration: Operations Skill 34: Introduction to Division Level C 1) Equal Groups of Eggs 2) Sharing Oranges Equally 3) Division Introduction - Eggs 4) Division Introduction – Oranges</p>
Week 4 & 5	<p>Focus: Money and Patterns Books: Alexander, Who Used to be Rich Last Sunday Arthur's Funny Money</p> <p>Day 1: Quarters</p> <ul style="list-style-type: none"> • Quarter wksts. R 4-3, P 4-3, E 4-2, R 4-4 • Money Trading: Race to a Quarter <p>Day 2: Half Dollars</p> <ul style="list-style-type: none"> • Wksts. P 4-6, E 4-7, Counting Money, Buy a Charm <p>Day 3: Dollar</p> <ul style="list-style-type: none"> • Get to a Dollar Chart [Use 	<p>N3,4</p> <p>P1,2,3</p>	<p>N3. Count money and make change using coins and a dollar bill.</p> <p>Understanding Numeration: Counting Skill 7: Counting Using Money Level B 1) Pennies, Nickels, Dimes (USA/Canadian) 2) Coins - Count by 10s, 5s and 1s (USA/Canadian) Do Skill Test - 5 questions (randomly generated)</p> <p>Level C 1) Quarters (USA/Canadian) Do Skill Test - 5 questions (randomly generated) USA</p> <p>Level D 1) Dollars (USA/Canadian) Do Skill Test - 5 questions (randomly generated)</p> <p>Understanding Numeration: Problem Solving Skill 4: Make a Table Level A,B,C,D 2) Muffins</p>



	<p>coins and dice]</p> <ul style="list-style-type: none"> • Wkst.P4-8 <p>Day 4: Race to \$1.00 (Collect a \$1.00)</p> <ul style="list-style-type: none"> • TM: Alexander, Who Used to be Rich Last Sunday activity <p>Day 5: Coin Problems</p> <ul style="list-style-type: none"> • TM: *My Coins Go Jingle-Jangle (Glyph) • TM: * Arthur's Funny Money • TM: * Money card game [I Have...] • POW: 2nd Qtr #4 Describe the Pattern <p>Day 1: TM: Describing Patterns with Letters</p> <p>Day 2: TM: Cube Patterns Change to Numbers</p> <p>TM: *Additional pattern activities if needed</p>		<p><i>N4. Represent and write the value of money using the ¢ sign and in decimal form when using the \$ sign.</i></p> <p>Understanding Numeration: Counting</p> <p>Skill 7: Counting Using Money</p> <p>Level B 1) Pennies, Nickels, Dimes (USA/Canadian) 2) Coins - Count by 10s, 5s and 1s (USA/Canadian) Do Skill Test - 5 questions (randomly generated)</p> <p>Level C 1) Quarters (USA/Canadian) Do Skill Test - 5 questions (randomly generated) USA</p> <p>Level D 1) Dollars (USA/Canadian) Do Skill Test - 5 questions (randomly generated)</p> <p><i>P1. Extend simple number patterns (both repeating and growing patterns), and create similar patterns using different objects, such as using physical materials or shapes to represent numerical patterns.</i></p> <p>Understanding Algebra 2008</p> <p>Section 3: Patterns, Patterns, Patterns</p> <p>Introduction... Math is Patterns</p> <p>Geometric Patterns</p> <p>Example 1 Example 2 Example 3 Example 4 Example 5</p> <p>Number Patterns</p> <p>Example 1 Example 2 Example 3 Example 4</p>
--	---	--	---



		<p>Number and Geometric Patterns Example 1 Example 2</p> <p><i>P2. Use patterns to make generalizations and predictions; e.g., determine a missing element in a pattern.</i></p> <p>Understanding Numeration: Problem Solving Skill 2: Find a Pattern Level A,B,C,D 1) Johnny's Pennies 2) Toy Animals Skill 7: Birthday Party Level A,B,C,D 1) Birthday Party Skill 8: Brick Path Level A,B,C,D 1) Brick Path Skill 9: Step Up Level A,B,C,D 1) Step Up Skill 10: The Track Team Level A,B,C,D 1) The Track Team</p> <p>Understanding Algebra 2008 Section 3: Patterns, Patterns, Patterns Number Patterns Example 1 Example 2 Example 3 Example 4 Number and Geometric Patterns Example 1 Example 2</p> <p><i>P3. Create new patterns with consistent rules or plans, and describe the rule or general plan of existing patterns.</i></p> <p>Not yet correlated</p>
--	--	--



<p>Week 6</p>	<p>Focus: Equivalence & Time Day 1: TM: Is it Equal? <ul style="list-style-type: none"> • Wkst. Equiv. Practice 1 Day 2: Equivalence activities and Practice 2 Day 3: Equivalence Practice 3 and 4 Day 4 : Equivalence Story Problems Day 5: TM: Begin Time: Hands on the Hour [Aims] POW 2nd Qtr #5 How Many More Books?</p>	<p>P5</p> <p>M1,3</p>	<p><i>P5. Understand equivalence and extend the concept to situations involving symbols; e.g., $4 + 5 = 9$ and $9 = 4 + 5$, and $4 + 5 = 3 + 6 = \underline{\quad} + \underline{\quad} \dots$</i></p> <p>Understanding Numeration: Operations</p> <p>Skill 5: Demonstrate Addition Facts... Making 5 Level A 1) Ways to Make 5 2) Ways to Make 5 - Reverse Order</p> <p>Skill 6: Demonstrate Addition Facts... Making 6 Level A 1) Ways to Make 6 2) Ways to Make 6 - Reverse Order</p> <p>Skill 7: Demonstrate Addition Facts... Making 7 Level A 1) Ways to Make 7 2) Ways to Make 7 - Reverse Order</p> <p>Skill 8: Demonstrate Addition Facts... Making 8 Level A 1) Ways to Make 8 2) Ways to Make 8 - Reverse Order Do Skill Test - 5 questions (randomly generated)</p> <p>Skill 9: Demonstrate Addition Facts... Making 9 Level A 1) Ways to Make 9 2) Ways to Make 9 - Reverse Order</p> <p>Skill 11: Demonstrate Addition Facts... Patterns Level A 1) Bar Machine 2) Decomposition Tree #1 Level B 1) Decomposition Tree #2 Level C 1) Decomposition Stack 2) Patterns in Addition Level D 1) Decomposition Tree #3</p> <p>Skill 13: Addition Strategies Level A 1) Tens and Doubles #1 Do Skill Test - 5 questions (randomly generated) Level B 1) Tens and Doubles #2 Do Skill Test - 5 questions (randomly generated) Level C 1) Darts - Add 3 or 4 Numbers Do Skill Test - 5 questions (randomly generated)</p>
----------------------	---	-------------------------------------	---



M1a. Identify and select appropriate units of measure for: a. length – centimeters, meters, inches, feet or yards;

Understanding Measurement and Geometry 2008

Section 1: An Introduction to Measurement

Measurement with a Ruler - Centimeters

A Pencil... An Introduction- Example 1

A Pencil... An Introduction- Example 2

Ruler - Click on the Point- 10 questions

Ruler - Click and Drag- 10 questions

Calculating Distances - Introduction- 10 questions

Calculating Distances - Distances- Example 1

Calculating Distances - Distances- Example 2

Calculating Distances - Distances- Example 3

Calculating Distances - Distances- Example 4

Calculating Distances - Distances- Example 5

Calculating Distances - Distances- Example 6

Measurement with a Ruler - Inches

A Pencil... An Introduction- Example 1

A Pencil... An Introduction- Example 2

Ruler - Click on the Point- 10 questions

Ruler - Click and Drag- 10 questions

Calculating Distances - Introduction- 10 questions

Calculating Distances - Distances- Example 1

Calculating Distances - Distances- Example 2

Calculating Distances - Distances- Example 3

Calculating Distances - Distances- Example 4

Calculating Distances - Distances- Example 5

Calculating Distances - Distances- Example 6



		<p><i>M1b. Identify and select appropriate units of measure for: b. volume (capacity) – liters, cups, pints or quarts;</i></p> <p>Not yet correlated</p> <p><i>M1c. Identify and select appropriate units of measure for: c. weight – grams, ounces or pounds;</i></p> <p>Not yet correlated</p> <p><i>M1d. Identify and select appropriate units of measure for: d. time – hours, half-hours, quarter-hours or minutes and time designations, a.m. or p.m.</i></p> <p>Understanding Numeration: Comparing & Ordering</p> <p>Skill 9: Understand Measurement of Time</p> <p>Level B 1) The Clock - An Introduction 2) Times to the Hour 3) Analog and Digital 4) Times to the Half Hour Do Skill Test - 10 questions (randomly generated)</p> <p>Level C 1) Times to Five Minutes Do Skill Test - 5 questions (randomly generated)</p> <p>Level D 1) Times to the Minute Do Skill Test - 5 questions (randomly generated)</p> <p><i>M3. Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?</i></p> <p>Understanding Measurement and Geometry 2008</p> <p>Section 1: An Introduction to Measurement</p> <p>Metric Conversions - Length Introduction - Off Computer Understanding Metric Prefixes</p>
--	--	--



			<p>Metric Prefixes at Work Metric Match - Introduction Metric Match - Examples- 3 questions (randomly generated)</p> <p>Converting US Standard Conversions - Length Introduction - Off Computer Converting</p>
Week 7	<p>Focus: Time -Use as many of these Aims activities as you need for your students. Practice booklet can be used for practice in combination with activities.</p> <ul style="list-style-type: none"> • TM: Time by Fives: • TM: Double Time: • TM: Name That Time • TM: Two Timers <p>Day 1: How Time Flies Day 2-5: Additional Worksheets for Students Day 5: POW 2nd Qtr # 6 Describe the Pattern</p> <p>Vocabulary: Standard measures of time</p> <p style="text-align: center;">Second (time)</p>	M1, 3, 4	<p><i>M1a. Identify and select appropriate units of measure for: a. length – centimeters, meters, inches, feet or yards;</i></p> <p>Understanding Measurement and Geometry 2008 Section 1: An Introduction to Measurement Measurement with a Ruler - Centimeters A Pencil... An Introduction- Example 1 A Pencil... An Introduction- Example 2 Ruler - Click on the Point- 10 questions Ruler - Click and Drag- 10 questions Calculating Distances - Introduction- 10 questions Calculating Distances - Distances- Example 1 Calculating Distances - Distances- Example 2 Calculating Distances - Distances- Example 3 Calculating Distances - Distances- Example 4 Calculating Distances - Distances- Example 5 Calculating Distances - Distances- Example 6 Measurement with a Ruler - Inches A Pencil... An Introduction- Example 1 A Pencil... An Introduction- Example 2 Ruler - Click on the Point- 10 questions Ruler - Click and Drag- 10 questions Calculating Distances - Introduction</p>



			<p>Calculating Distances - Distances- Example 1 Calculating Distances - Distances- Example 2 Calculating Distances - Distances- Example 3 Calculating Distances - Distances- Example 4 Calculating Distances - Distances- Example 5 Calculating Distances - Distances- Example 6</p> <p><i>M1b. Identify and select appropriate units of measure for: b. volume (capacity) – liters, cups, pints or quarts;</i></p> <p>Not yet correlated</p> <p><i>M1c. Identify and select appropriate units of measure for: c. weight – grams, ounces or pounds;</i></p> <p>Not yet correlated</p> <p><i>M1d. Identify and select appropriate units of measure for: d. time – hours, half-hours, quarter-hours or minutes and time designations, a.m. or p.m.</i></p> <p>Understanding Numeration: Comparing & Ordering Skill 9: Understand Measurement of Time Level B 1) The Clock - An Introduction 2) Times to the Hour 3) Analog and Digital 4) Times to the Half Hour Do Skill Test - 10 questions (randomly generated) Level C 1) Times to Five Minutes Do Skill Test - 5 questions (randomly generated) Level D 1) Times to the Minute Do Skill Test - 5 questions (randomly generated)</p>
--	--	--	---



M3. Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?

Understanding Measurement and Geometry 2008

Section 1: An Introduction to Measurement

Metric Conversions - Length

Introduction - Off Computer

Understanding Metric Prefixes

Metric Prefixes at Work

Metric Match - Introduction

Metric Match - Examples- 3 questions

Converting

US Standard Conversions - Length

Introduction - Off Computer

Converting

M4. Tell time to the nearest minute interval on digital and to the nearest 5 minute interval on analog (dial) timepieces.

Understanding Numeration: Comparing & Ordering

Skill 9: Understand Measurement of Time

Level C 1) Times to Five Minutes

Do Skill Test - 5 questions (randomly generated)

Level D 1) Times to the Minute

Do Skill Test - 5 questions (randomly generated)



<p>Week 8</p>	<p>Focus: Time Day 1: TM: Flipping Over Time[Copy large #'s]</p> <ul style="list-style-type: none"> • SM: Can You Tell Time recording sht. • TM: Choose activities for more practice: <p>Day 2: TM: Bingo Time</p> <ul style="list-style-type: none"> • TM: Time, Time, Time • TM: Telling Time <p>Day 3: TM: What Time is It? Day 4 & 5: Story Problems 15A, 15B, 15F, 15J</p> <ul style="list-style-type: none"> • POW 2nd Qtr # 7 Shell Boxes 	<p>M1, 3, 4</p>	<p><i>M1a. Identify and select appropriate units of measure for: a. length – centimeters, meters, inches, feet or yards;</i></p> <p>Understanding Measurement and Geometry 2008 Section 1: An Introduction to Measurement Measurement with a Ruler - Centimeters A Pencil... An Introduction- Example 1 A Pencil... An Introduction- Example 2 Ruler - Click on the Point- 10 questions Ruler - Click and Drag- 10 questions Calculating Distances - Introduction- 10 questions Calculating Distances - Distances- Example 1 Calculating Distances - Distances- Example 2 Calculating Distances - Distances- Example 3 Calculating Distances - Distances- Example 4 Calculating Distances - Distances- Example 5 Calculating Distances - Distances- Example 6 Measurement with a Ruler - Inches A Pencil... An Introduction- Example 1 A Pencil... An Introduction- Example 2 Ruler - Click on the Point- 10 questions Ruler - Click and Drag- 10 questions Calculating Distances - Introduction Calculating Distances - Distances- Example 1 Calculating Distances - Distances- Example 2 Calculating Distances - Distances- Example 3 Calculating Distances - Distances- Example 4 Calculating Distances - Distances- Example 5 Calculating Distances - Distances- Example 6</p> <p><i>M1b. Identify and select appropriate units of measure for: b. volume (capacity) – liters, cups, pints or quarts;</i></p> <p>Not yet correlated</p>
----------------------	---	------------------------	--



		<p><i>M1c. Identify and select appropriate units of measure for: c. weight – grams, ounces or pounds;</i></p> <p>Not yet correlated</p> <p><i>M1d. Identify and select appropriate units of measure for: d. time – hours, half-hours, quarter-hours or minutes and time designations, a.m. or p.m.</i></p> <p>Understanding Numeration: Comparing & Ordering</p> <p>Skill 9: Understand Measurement of Time</p> <p>Level B 1) The Clock - An Introduction 2) Times to the Hour 3) Analog and Digital 4) Times to the Half Hour Do Skill Test - 10 questions (randomly generated)</p> <p>Level C 1) Times to Five Minutes Do Skill Test - 5 questions (randomly generated)</p> <p>Level D 1) Times to the Minute Do Skill Test - 5 questions (randomly generated)</p> <p><i>M3. Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?</i></p> <p>Understanding Measurement and Geometry 2008</p> <p>Section 1: An Introduction to Measurement</p> <p>Metric Conversions - Length</p> <p>Introduction - Off Computer Understanding Metric Prefixes Metric Prefixes at Work Metric Match - Introduction Metric Match - Examples- 3 questions Converting</p>
--	--	---



			<p>US Standard Conversions - Length Introduction - Off Computer Converting</p> <p><i>M4. Tell time to the nearest minute interval on digital and to the nearest 5 minute interval on analog (dial) timepieces.</i></p> <p>Understanding Numeration: Comparing & Ordering Skill 9: Understand Measurement of Time Level C 1) Times to Five Minutes Do Skill Test - 5 questions (randomly generated) Level D 1) Times to the Minute Do Skill Test - 5 questions (randomly generated)</p>
<p>Week 9</p> <p>Or, see next pg. option</p> <p>Week 9 continued</p>	<p>Focus: Rev. Story Prob., Equivalence, Place Value</p> <p>Day 1 & 2: Story Problems 9A, 9B, 9C, 9D Day 3: Review Equivalence # 5 & 6 Day 4: Place value: Use blocks [tens, ones] & draw it Day 5: Practice Math Assessment</p> <ul style="list-style-type: none"> POW 2nd Qtr #8 Describe the Pattern <p>Or...your class may be ready to ... *Begin Putting Together, Taking Apart Focus: Introducing 2 digit Addition and Subtraction All in TM.</p> <ul style="list-style-type: none"> Introducing Combining Situations: Putting Together, Taking Apart: 	<p>N 12</p> <p>N6, 12</p>	<p><i>N12. Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as: a. compatible numbers;</i></p> <p>Understanding Numeration: Operations Skill 13: Addition Strategies Level A 1) Tens and Doubles #1 Do Skill Test - 5 questions (randomly generated) Level B 1) Tens and Doubles #2 Do Skill Test - 5 questions (randomly generated) Level C 1) Darts - Add 3 or 4 Numbers Do Skill Test - 5 questions (randomly generated)</p> <p><i>N12. Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as: b. compensatory numbers;</i></p> <p><i>Not yet correlated</i></p>



	<p>INV. 1, SSN. 1, pg. 4 (Use as preassessment to see what strategies students use. Share strategies and list on a chart.)</p> <ul style="list-style-type: none"> • Introducing Separating Situations: INV. 1, SSN. 2, pg. 20 (Use as pre-assessment to identify student strategies.) • Story Problems: INV. 1, SSN. 3, page 28 • Introducing a New Kind of Addition Problem: INV. 1, SSN. 4, pg. 30 <p>(See page 149 in Second Grade Math to start with smaller numbers.)</p>	<p><i>N12. Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as: c. informal use of commutative and associative properties of addition.</i></p> <p>Understanding Numeration: Operations Skill 12: Add 3 or 4 Numbers Level A 1) Add 3 Numbers Vertically...#1 2) Add 3 Numbers Horizontally...#1 Level B 1) Add 3 Numbers Vertically...#2 2) Add 3 Numbers Horizontally...#2</p> <p>Understanding Whole Numbers and Integers 2008 Section 9: Order of Operations Order in Addition - Whole Numbers Trial 1 Trial 2 Conclusion</p> <p><i>N6. Model, represent and explain subtraction as comparison, take-away and part-to-whole; e.g., solve missing addend problems by counting up or subtracting, such as "I had six baseball cards, my sister gave me more, and I now have ten. How many did she give me?" can be represented as $6 + ? = 10$ or $10 - 6 = ?$.</i></p> <p>Understanding Numeration: Operations Skill 11: Demonstrate Addition Facts... Patterns Level C 1) Decomposition Stack Skill 18: Introduce Subtraction Concretely... "Take Away" Level A 1) Introduction to Subtraction #1 2) Introduction to Subtraction #2 Do Skill Test - 5 questions (randomly generated) Skill 19: Introduce Subtraction Concretely... # - # = # Level A 1) Introduction to Subtraction #3 2) Introduction to Subtraction #4</p>
--	---	---



			<p>3) Introduce Vertical Subtraction Do Skill Test - 10 questions (randomly generated)</p> <p>Level C 1) Subtraction Sentences Do Skill Test - 5 questions (randomly generated)</p> <p>Skill 20: Fact Families... Add and Subtract</p> <p>Level A 1) Doubles - Add and Subtract 2) Relate Addition and Subtraction 3) Fact Families #1 Do Skill Test - 10 questions (randomly generated)</p> <p>Level B 1) Doubles - Add and Subtract 2) Fact Families #2 Do Skill Test - 5 questions (randomly generated)</p> <p>Level C 1) Check Subtraction by Addition Do Skill Test - 5 questions (randomly generated)</p> <p>Understanding Numeration: Problem Solving Skill 1: Draw a Picture Level A,B,C,D 1) Eating Apples</p> <p><i>Note Week 9 Focus: Rev. Story Prob., Equivalence, Place Value</i></p> <p>Story Problems</p> <p>Understanding Numeration: Problem Solving Skill 1: Draw a Picture Level A,B,C,D 1) Eating Apples Skill 2: Find a Pattern Level A,B,C,D 2) Toy Animals Skill 3: Number Sentence Level A,B,C,D 1) Oranges Skill 4: Make a Table Level A,B,C,D 2) Muffins Skill 5: Make a Graph Level A,B,C,D 1) Classroom Shoes Skill 6: Guess and Check</p>
--	--	--	--



			<p>Level A,B,C,D 2) The Gravy Spill Skill 7: Birthday Party Level A,B,C,D 1) Birthday Party Skill 8: Brick Path Level A,B,C,D 1) Brick Path</p> <p>Place Value</p> <p>Understanding Numeration: Place Value Skill 4: Identify Place Value Patterns (to 100) Level C 1) Pictures to Numbers #2 2) Tens & Ones to Pictures #2 3) Numbers to Pictures #2 4) 2 Digit Numbers - Different Ways Do Skill Test - 5 questions (randomly generated) Skill 5: Identify Place Value Patterns (to 1000) Level D 1) Expanded Notation Do Skill Test - 5 questions (randomly generated)</p> <p>Understanding Whole Numbers and Integers 2008 Section 1: The Meaning of Whole Numbers Seeing the Number To Tens- Example 1 To Tens- Example 2 To Hundreds- Example 1 To Hundreds- Example 2 Expanded Notation To 999- Example 1 To 999- Example 2 Represent Numbers in Many Ways Example 1 Example 2 Example 3 Example 4</p>
--	--	--	---



<p>Week 10</p>	<p>Focus: Story Problems and Working with 100 Day 1: Writing Your Own Story Problems: INV. 1, SSN. 5 Day 2: Story Problems Set E Day 3: Get to 100: INV. 2, SSN. 1 Day 4: Working With 100: INV. 2, SSN 4 Day 5: There are many other games to reinforce 100. If more practice is needed, choose from the other games in this section. Other games worth using are in the Second Grade Math: Make 100, page 146 and Four Strikes and You're Out, page 147.</p> <ul style="list-style-type: none"> • POW: #10 How Many More? <p>Give 1st Quarter Assessment as designated</p>	<p>N1</p>	<p><i>N1a. Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example: a. Recognize 10 can mean “10 ones” or a single entity (1 ten) through physical models and trading games.</i></p> <p>Understanding Numeration: Place Value Skill 2: Model Numbers Grouped in Packages Level C 1) Ones and Groups of Ten Do Skill Test - 5 questions (randomly generated)</p> <p>Understanding Whole Numbers and Integers 2008 Section 1: The Meaning of Whole Numbers Seeing the Number To Tens- Example 1 To Tens- Example 2 Represent Numbers in Many Ways Example 1</p> <p><i>N1b. Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example: b. Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.</i></p> <p>Understanding Numeration: Place Value Skill 5: Identify Place Value Patterns (to 1000) Level D 1) Expanded Notation Do Skill Test - 5 questions (randomly generated)</p> <p>Understanding Whole Numbers and Integers 2008 Section 1: The Meaning of Whole Numbers Seeing the Number To Hundreds- Example 1 To Hundreds- Example 2</p>
-----------------------	---	------------------	---



		<p>Expanded Notation To 999- Example 1 To 999- Example 2</p> <p>Represent Numbers in Many Ways Example 2 Example 3 Example 4</p> <p><i>Note Week 10 Focus: Story Problems and Working with 100</i></p> <p>Story Problems</p> <p>Understanding Numeration: Problem Solving Skill 1: Draw a Picture Level A,B,C,D 1) Eating Apples Skill 2: Find a Pattern Level A,B,C,D 2) Toy Animals Skill 3: Number Sentence Level A,B,C,D 1) Oranges Skill 4: Make a Table Level A,B,C,D 2) Muffins Skill 5: Make a Graph Level A,B,C,D 1) Classroom Shoes Skill 6: Guess and Check Level A,B,C,D 2) The Gravy Spill Skill 7: Birthday Party Level A,B,C,D 1) Birthday Party Skill 8: Brick Path Level A,B,C,D 1) Brick Path</p>
--	--	--

