

Section	Outcomes	Modifications	Resources
1.1 Algebra: Patterns : Patterns on a Hundreds Chart	N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.	Leveled work Color in number patterns on a hundred chart	Hundreds chart Individual hundreds chart
1.2 Locate points on a number line	Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work Write number lines on the board	whiteboard
1.3 Place Value: 3 digits	N.ME.03.02 Identify the place value of a digit in a number, e.g., in 3,241, 2 is in the hundreds place. Recognize and use expanded notation for numbers using place value through 9,999, e.g., 2,517 is $2000 + 500 + 10 + 7$; 4 hundreds and 2 ones is 402.	Leveled work Use base ten pieces on a large place value chart	base ten pieces large base ten charts
1.4 Place Value: 4 digits	N.ME.03.01 Read and write numbers to 10,000 in both numerals and words, and relate them to the quantities they represent, e.g., relate numeral or written word to a display of dots or objects.	Leveled work Same as above	Same as above
1.5 Place Value: 5 and 6 digits	Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work Use expanded notation	
1.6 Problem Solving Strategy: Use Logical Reasoning	Apply and adapt a variety of appropriate strategies to solve problems	Leveled work	Textbook

Subject: Math Grade: 3rd Chapter/Outcome: Compare, Order, and Round Numbers (2) Date Revised: February 2010

Section	Outcomes	Modifications	Resources
2.1 Compare Numbers	N.ME.03.03 Compare and order numbers up to 10,000. and order numbers up to 10,000.	Leveled work Use base-ten pieces	textbook
2.2 Order Numbers	N.ME.03.03 Compare and order numbers up to 10,000.	Leveled work	textbook
2.3 Problem Workshop Skill: Use a Model	N.ME.03.03 Compare and order numbers up to 10,000.	Leveled work	textbook
2.4 Round to the Nearest Ten and Hundred	Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work Practice in journals	textbook Math journals
2.5 Round to the Nearest Thousand	Understand the place value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work Practice in journals	Textbook Math journals

Subject: Math Grade: 3rd Chapter/Outcome: Addition (3) Date Revised: February 2010

Section	Outcomes	Modifications	Resources
3.1 Algebra: Addition Properties	Identify such properties as commutative, associative, and distributive and use them to commute with whole numbers.	Leveled work Unifix cubes	Unifix cubes
3.2 Algebra: Missing Addends	NCTM Algebra: Model problem situations with objects and use representations such as graphs, tables, and equations to draw conclusions.	Leveled work	Math journals Textbooks
3.3 Estimate Sums	N.FL.03.07 Estimate the sum and difference of two numbers with three digits (sums up to 1,000), and judge reasonableness of estimates.	Leveled work	Math journals
3.4 Add 2-Digit Numbers	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Place value boards Base ten sets	Place value boards Base ten sets
3.5 Hands On: Model 3-Digit Addition	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Place value boards Base ten sets	Place value boards Base ten sets
3.6 Add Greater Numbers	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Place value boards Base ten sets	Place value boards Base ten sets
3.7 Problem Solving Workshop Strategy: Predict and Test	NCTM Problem Solving: Building new mathematical knowledge through problem solving.	Leveled work Samples on overhead	Math journals
3.8 Choose a Method	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work	Textbooks Math journals

Subject: Math

Grade: 3rd

Chapter/Outcome: Subtraction (4)

Date Revised: February 2010

Section	Outcomes	Modifications	Resources
4.1 Algebra: Fact Families	NCTM Algebra: Describe, extend, and make generalizations about geometric and numeric patterns.	Leveled work Unifix cubes M&Ms	Unifix cubes M&Ms
4.2 Estimate Differences	N.FL.03.07 Estimate the sum and difference of two numbers with three digits (sums up to 1,000), and judge reasonableness of estimates.	Leveled work Samples on overhead	Textbook Math journals
4.3 Subtract 2-Digit Numbers	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Place value boards Base ten sets	Place value boards Base ten sets
4.4 Hands On: Model 3-Digit Subtraction	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Place value boards Base ten sets	Place value boards Base ten sets
4.5 Subtract Greater Numbers	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Place value boards Base ten sets	Place value boards Base ten sets
4.6 Problem Solving Workshop Skill: Estimate or Exact Answer	N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.	Leveled work Unifix cubes	Textbooks Math journals Unifix cubes
4.7 Subtract Across Zeros	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Place value boards Base ten sets	Place value boards Base ten sets Math journals
4.8 Choose a Method	N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.	Leveled work Math journals	Textbooks Math journals
4.9 Problem Solving Workshop Skill: Choose the Operation	N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.	5 -	

Section	Outcomes	Modifications	Resources
5.1 Count Bills and Coins	NCTM Number and Operations: Develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experiences.	Leveled work Paper play money	Paper play bills and coins
5.2 Compare Money Amounts	NCTM Number and Operations: Develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experiences.	Leveled work Play money	Play money Math journals Textbooks
5.3 Problem Solving Workshop Strategy: Make a Table	NCTM Problem Solving: Solve problems that arise in mathematics and in other contexts.	Leveled work	Textbooks Math journals
5.4 Model Making Change	NCTM Number and Operations: Develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experiences.	Leveled work Play money	Play money
5.5 Add and Subtract Money Amounts	M.PS.03.11 Add and subtract money in dollars and cents.	Leveled work Play money	Play money
5.6 Tell Time	M.UN.03.01 Know and use common units of measurements in length, weight and time.	Leveled work Large teacher instructional clock Small student clocks	Large teacher instructional clock Small students clocks
5.7 A.M. and P.M.	NCTM Measurement: Select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles. M.UN.03.02	Leveled work Instructional clocks	Instructional clocks Examples in textbooks

5.8 Model Elapsed Time	Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months.	Leveled work Instructional clocks	Instructional clocks Examples in textbooks
5.9 Use a Calendar	M.PS.03.12 Solve applied problems involving money, length and time.	Leveled work Sample calendar	Sample calendar Examples to use in textbook
5.10 Sequence Events	NCTM Measurement: Select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles.	Leveled work	Textbook

Subject: Math

Grade: 3rd

Chapter/Outcome: Data (6)

Date Revised: February 2010

Section	Outcomes	Modifications	Resources
6.1 Collect Data	NCTM Data Analysis and Probability: Collect data using observations, surveys, and experiments.	Leveled work Do a class survey Complete a math lab (data table, graph, explore data)	Objects to count to complete math lab Copies of data table and graph paper
6.2 Read a Pictograph	NCTM Data Analysis and Probability: Collect data using observations, surveys, and experiments.		
6.3 Problem Solving Workshop Strategy: Make a Graph	NCTM Problem Solving: Solve problems that arise in mathematics and in other contexts.	Leveled work Items to count to create graph	Objects to count to create graph, Copies of data table and graph paper

6.4 Read a Bar Graph	D.R.E.03.01 Read and interpret bar graphs in both horizontal and vertical forms.	Leveled work Pictures of horizontal and vertical graphs	Textbook Pictures of horizontal and vertical graphs
6.5 Problem Solving Workshop Strategy: Make a Graph	D.RE.03.02 Read scales on the axes and identify the maximum, minimum, and range of values in a bar graph.	Leveled work Objects to create a graph	Objects to count to create a graph
6.6 Hands On: Take a Survey	NCTM Data Analysis and Probability: Collect data using observations, surveys, and experiments.	Leveled work Students survey class	Students survey classmates and create a graph to reflect results
6.7 Classify Data	NCTM Data Analysis and Probability: Represent data using tables and graphs such as line plots, bar graphs, and line graphs.	Leveled work	Textbooks Math journals
6.8 Line Plots	D.RE.03.02 Read scales on the axes and identify the maximum, minimum, and range of values in a bar graph.	Leveled work Copies of line plots to analyze	Textbooks Copies of graph paper to create line plots
6.9 Algebra: Ordered Pairs	NCTM Algebra: Model Problem situations with objects and use representations such as graphs, tables, and equations to draw conclusions.	Leveled work Pictures of grids with ordered pairs	Textbooks with pictures of ordered pairs on grids
6.10 Read a Line Graph	NCTM Data Analysis and Probability: Describe the share and important features of a set of data and compare related data sets, with an emphasis on how the data are distributed.	Leveled work	Textbooks with examples of line graphs to interpret

Section	Outcomes	Modifications	Resources
7.1 Probability: Likelihood of Events	NCTM Data Analysis and Probability: Propose and Justify conclusions and predictions that are based on data and design studies to further investigate the conclusions or predictions.	Leveled work	Students to survey and interpret results
7.2 Hands On: Possible Outcomes	NCTM Data Analysis and Probability: Propose and Justify conclusions and predictions that are based on data and design studies to further investigate the conclusions or predictions.	Leveled work Various objects in a bag	Various objects in a bag
7.3 Experiments	NCTM Data Analysis and Probability: Propose and Justify conclusions and predictions that are based on data and design studies to further investigate the conclusions or predictions.	Leveled work	Materials to conduct experiment and check conclusions
7.4 Combinations	NCTM Data Analysis and Probability: Predict the probability of simple experiments and test the predictions.	Leveled work	Materials to conduct experiment and check conclusions
7.5 Problem Solving Workshop Strategy: Make an Organized List	NCTM Problem Solving: Apply and adapt a variety of appropriate strategies to solve problems.	Leveled work	Textbooks Math journals-

Section	Outcomes	Modifications	Resources
8.1 Algebra: Addition to Multiplication	<p>N.ME.03.04 Count orally by 6's, 7's, 8's and 9's starting with 0, making the connection between repeated addition and multiplication.</p> <p>N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p> <p>N.MR.03.10 Recognize situations that can be solved using multiplication and division including finding "How many groups?" and "How many in a group?" and write mathematical statements to represent those situations.</p>	<p>Leveled work Unifix cubes</p> <p>Leveled work Unifix cubes</p>	<p>Cards with number patterns for 6's, 7's, 8's, 9's Unifix cubes</p> <p>Unifix cubes</p>
8.2 Model with Arrays	<p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Unifix cubes</p>
8.3 Multiply with 2	<p>N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p> <p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p> <p>N.FL.03.11 Find products fluently up to 10 x 10; find</p>	<p>Leveled work Unifix cubes</p>	<p>Unifix cubes Numberline</p>

8.4 Multiply with 4	<p>related quotients using multiplication and division relationships. N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p> <p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p>	<p>Leveled work Unifix cubes</p>	<p>Unifix cubes numberline</p>
8.5 Algebra: Multiply with 1 and 0	<p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p> <p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p>	<p>Leveled work Unifix cubes</p>	<p>Unifix cubes Multiplication chart to see pattern of number counting of products numberline</p>
8.6 Multiply with 5 and 10	<p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work Unifix cubes</p>	<p>Multiplication table Math journals Unifix cubes</p>
8.7 Problem Solving Workshop Strategy: Draw a Picture	<p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Math journals Textbooks</p>

Section	Outcomes	Modifications	Resources
9.1 Multiply with 3	<p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p> <p>N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p>	<p>Leveled work Unifix cubes Number line</p>	<p>unifix cubes multiplication table</p>
9.2 Multiply with 6	<p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p> <p>N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p>	<p>Leveled work Unifix cubes Number line</p>	<p>unifix cubes multiplication table number line M&Ms or other counters</p>
9.3 Multiply with 8	<p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p> <p>N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p>	<p>Leveled work Unifix cubes Number line</p>	<p>Unifix cubes Number line M&Ms or other counters</p>

<p>9.4 Algebra: Patterns with 9</p>	<p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships. N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p>	<p>Leveled work Unifix cubes or other counters</p>	<p>Unifix cubes or other counters Number line Multiplication table</p>
<p>9.5 Multiply with 7</p>	<p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships. N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p>	<p>Leveled work Unifix cubes or other counters Number line</p>	<p>Unifix cubes or other counters Numberline Multiplication table</p>
<p>9.6 Problem Solving Workshop Strategy: Compare Strategies</p>	<p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Textbooks Examples of word problems using the four operations</p>
<p>9.7 Algebra: Multiplication Facts through 12</p>	<p>N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.</p>	<p>Leveled work</p>	<p>Unifix cubes or other counters Number line Multiplication table up to 12's</p>

Section	Outcomes	Modifications	Resources
10.1 Rule	N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.	Leveled work Set of rules on chart paper or use textbook	Textbooks Set of rules on chart paper or use textbooks
10.2 Missing Factors	N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships. N.MR.03.12 Find solutions to open sentences such as $7x = 42$ or $12 \div = 4$, using the inverse relationship between multiplication and division.	Leveled work	Multiplication table
10.3 Multiply 3 Factors	N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships. N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.	Leveled work	Textbooks – use associative property Math journals
10.4 Multiplication Properties	N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships.	Leveled work Set of multiplication properties on chart paper or in textbook	Set of multiplication tables on chart paper or in textbook to work examples
10.5 Problem Solving Workshop Strategy: Multistep Problems	M.PS.03.12 Solve applied problems involving money, length and time.	Leveled work	Textbooks Math journals

Section	Outcomes	Modifications	Resources
11.1 Model Division	<p>N.ME.03.05 Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.</p> <p>N.MR.03.10 Recognize situations that can be solved using multiplication and division including finding "How many groups?" and "How many in a group?" and write mathematical statements to represent those situations.</p>	<p>Leveled work Unifix cubes or other counters</p>	<p>Unifix cubes or other counters</p>
11.2 Relate Division and Subtraction	<p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Textbooks Counters Math journals</p>
11.3 Hands On: Model with Arrays	<p>NCTM Numbers and Operations: Understand various meanings of multiplication and division.</p>	<p>Leveled work</p>	<p>Counters to make arrays</p>
11.4 Algebra: Multiplication and Division	<p>N.MR.03.09 Use multiplication and division fact families to understand the inverse relationship of these two operations, e.g., because $3 \times 8 = 24$, we know that $24 \div 8 = 3$ or $24 \div 3 = 8$; express a multiplication statement as an equivalent division statement.</p> <p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Counters Math journals</p>

11.5 Algebra: Fact Families	N.MR.03.09 Use multiplication and division fact families to understand the inverse relationship of these two operations, e.g., because $3 \times 8 = 24$, we know that $24 \div 8 = 3$ or $24 \div 3 = 8$; express a multiplication statement as an equivalent division statement.	Leveled work	Math journals Counters
11.6 Problem Solving Workshop Strategy: Write a Number Sentence	N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.	Leveled work	Textbooks Math journals

Subject: Math

Grade: 3rd

Chapter/Outcome: Division Facts (12)

Date Revised: February 2010

Section	Outcomes	Modifications	Resources
12.1 Divide by 2 and 5	N.FL.03.11 Find products fluently up to 10×10 ; find related quotients using multiplication and division relationships.	Leveled work	Multiplication facts of 2 and 5 Math journals
12.2 Divide by 3 and 4	N.FL.03.11 Find products fluently up to 10×10 ; find related quotients using multiplication and division relationships.	Leveled work	Multiplication facts of 3 and 4 Math journals
12.3 Division Rules for 1 and 0	N.FL.03.11 Find products fluently up to 10×10 ; find related quotients using multiplication and division relationships. N.ME.03.05	Leveled work	Multiplication facts of 0 and 1 Math journals

<p>12.4 Algebra: Practice the Facts</p>	<p>Know that even numbers end in 0, 2, 4, 6, or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers. N.MR.03.09 Use multiplication and division fact families to understand the inverse relationship of these two operations, e.g., because $3 \times 8 = 24$, we know that $24 \div 8 = 3$ or $24 \div 3 = 8$; express a multiplication statement as an equivalent division statement. N.FL.03.11 Find products fluently up to 10×10; find related quotients using multiplication and division relationships. N.MR.03.12 Find solutions to open sentences such as $7 \times \quad = 42$ or $12 \div \quad = 4$, using the inverse relationship between multiplication and division. N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Multiplication and division flashcards Math journals Multiplication and division Bingo Multiplication and division facts on CD (perhaps set to music) Practice sheets Computer software</p>
<p>12.5 Problem Solving Workshop Skill: Choose the Operation</p>		<p>Leveled work</p>	<p>Textbooks Math journals</p>

Section	Outcomes	Modifications	Resources
13.1 Divide by 6	<p>N.FL.03.11 Find products fluently up to 10×10; find related quotients using multiplication and division relationships.</p> <p>N.MR.03.12 Find solutions to open sentences such as $7x = 42$ or $12 \div = 4$, using the inverse relationship between multiplication and division.</p> <p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	Leveled work	<p>Multiplication table Math journals Counters</p>
13.2 Divide by 7 and 8	<p>N.MR.03.09 Use multiplication and division fact families to understand the inverse relationship of these two operations, e.g., because $3 \times 8 = 24$, we know that $24 \div 8 = 3$ or $24 \div 3 = 8$; express a multiplication statement as an equivalent division statement.</p> <p>N.FL.03.11 Find products fluently up to 10×10; find related quotients using multiplication and division relationships.</p> <p>N.MR.03.12 Find solutions to open sentences such as $7x = 42$ or $12 \div = 4$, using the inverse relationship between multiplication and division.</p>	Leveled work	<p>Multiplication table Counters Math journals</p>
13.3 Problem Solving Workshop Strategy: Work Backward	<p>NCTM Problem Solving: Apply and adapt a variety of appropriate strategies to solve problems.</p>	Leveled work	<p>Textbooks Math journals</p>
13.4 Divide by 9 and 10	<p>N.MR.03.09 Use multiplication and division fact</p>	Leveled work	<p>Multiplication table Counters</p>

<p>13.5 Algebra: Division Facts Through 12</p>	<p>families to understand the inverse relationship of these two operations, e.g., because $3 \times 8 = 24$, we know that $24 \div 8 = 3$ or $24 \div 3 = 8$; express a multiplication statement as an equivalent division statement. N.FL.03.11 Find products fluently up to 10×10; find related quotients using multiplication and division relationships.</p> <p>N.FL.03.11 Find products fluently up to 10×10; find related quotients using multiplication and division relationships. N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Math journals</p> <p>Division flashcards Computer software Division Bingo Blackline masters</p>
<p>13.6 Algebra: Expressions and Equations</p>	<p>N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.</p>	<p>Leveled work</p>	<p>Math journals textbooks</p>

Section	Outcomes	Modifications	Resources
14.1 Line Segments and Angles	G.GS.03.01 Identify points, line segments, lines and distance.	Leveled work	Textbooks Overhead transparencies Whiteboard
14.2 Types of Lines	G.GS.03.02 Identify perpendicular lines and parallel lines in familiar shapes and in the classroom.	Leveled work	Rulers Math journals Textbooks Overhead transparencies
14.3 Identify Plane Figures	G.GS.03.02 Identify perpendicular lines and parallel lines in familiar shapes and in the classroom. G.GS.03.04 Identify, describe, compare and classify two-dimensional shapes, e.g., parallelogram, trapezoid, circle, rectangle, square and rhombus, based on their component parts (angles, sides, vertices, line segment) and on the number of sides and vertices.	Leveled work	Objects in classroom Textbooks Overhead transparencies 3-D math shapes
14.4 Triangles	G.GS.03.04 Identify, describe, compare and classify two-dimensional shapes, e.g., parallelogram, trapezoid, circle, rectangle, square and rhombus, based on their component parts (angles, sides, vertices, line segment) and on the number of sides and vertices.	Leveled work	Textbooks Overhead transparencies Math shapes
14.5 Quadrilaterals	G.GS.03.02 Identify perpendicular lines and parallel lines in familiar shapes and in the classroom. G.GS.03.04	Leveled work	Textbook Overhead transparencies

14.6 Circles	<p>Identify, describe, compare and classify two-dimensional shapes, e.g., parallelogram, trapezoid, circle, rectangle, square and rhombus, based on their component parts (angles, sides, vertices, line segment) and on the number of sides and vertices.</p> <p>G.SR.03.05 Compose and decompose triangles and rectangles to form other familiar two dimensional shapes, e.g., form a rectangle using two congruent right triangles, or decompose a parallelogram into a rectangle and two right triangles.</p> <p>G.GS.03.04 Identify, describe, compare and classify two-dimensional shapes, e.g., parallelogram, trapezoid, circle, rectangle, square and rhombus, based on their component parts (angles, sides, vertices, line segment) and on the number of sides and vertices.</p>	Leveled work	A variety of math shape cutouts
14.7 Problem Solving Workshop Strategy: Draw a Diagram	<p>NCTM Problem Solving: Apply and use a variety of appropriate strategies to solve a problem.</p>	Leveled work	Textbook Overhead transparencies A variety of math shape cutouts
14.8 Hands On: Combine Plane Figures	<p>G.SR.03.05 Compose and decompose triangles and rectangles to form other familiar two dimensional shapes, e.g., form a rectangle using two congruent right triangles, or decompose a parallelogram into a rectangle and two right triangles.</p>	Leveled work	Textbooks Math journals Pattern blocks Tangrams

Section	Outcomes	Modifications	Resources
15.1 Congruence Figures	NCTM Geometry: Explore congruence and similarity	Leveled work	Textbooks Overhead transparencies A variety of cutout shapes (some congruent and some not)
15.2 Problem Solving Workshop Strategy: Make a Model	G.SR.03.05 Compose and decompose triangles and rectangles to form other familiar two dimensional shapes, e.g., form a rectangle using two congruent right triangles, or decompose a parallelogram into a rectangle and two right triangles.	Leveled work	Pattern blocks Tangrams
15.3 Symmetry	NCTM Geometry: Identify, compare and analyze attributes of two and three dimensional shapes and develop vocabulary to describe the attributes.	Leveled work	Pattern blocks Textbooks A variety of cutout shapes
15.4 Lines of Symmetry	NCTM Geometry: Classify two and three dimensional shapes according to their properties and develop definitions of classes and shapes such as triangles and pyramids.	Leveled work	Pattern blocks Blackline master of shapes (some symmetrical and some not)
15.5 Similar Figures	NCTM Geometry: Explore congruence and similarity.	Leveled work	Textbooks Overhead transparencies
15.6 Slides, Flips and Turns	NCTM Geometry: Describe location and movement using common language and geometric vocabulary.	Leveled work	Cutout shapes

Section	Outcomes	Modifications	Resources
16.1 Identify Solid Figures	G.GS.03.03 Identify parallel faces of rectangular prisms in familiar shapes and in the classroom. G.GS.03.06 Identify, describe, build and classify familiar three-dimensional solids, e.g., cube, rectangular prism, sphere, pyramid, cone, based on their component parts (faces, surfaces, bases, edges, vertices).	Leveled work	Set of 3-D geometric shapes
16.2 Model Solid Figures	G.GS.03.06 Identify, describe, build and classify familiar three-dimensional solids, e.g., cube, rectangular prism, sphere, pyramid, cone, based on their component parts (faces, surfaces, bases, edges, vertices).	Leveled work	Paper cutout models of geometric shapes to assemble
16.3 Combine Solid Figures	NCTM Geometry: Identify, compare, and analyze attributes of two and three dimensional shapes and develop vocabulary to describe the attributes.	Leveled work	Sets of 3-D geometric shapes
16.4 Problem Solving Workshop Skill: Identify Relationship	G.SR.03.07 Represent front, top, and side views of solids built with cubes.	Leveled work	Interlocking cubes
16.5 Hands On: Draw Figures	G.GS.03.06 Identify, describe, build and classify familiar three-dimensional solids, e.g., cube, rectangular prism, sphere, pyramid, cone, based on their component parts (faces, surfaces, bases, edges, vertices).	Leveled work	Sets of solid shapes Math journals

Section	Outcomes	Modifications	Resources
17.1 Patterns	NCTM Algebra: Describe, extend and make generalizations about geometrics and numeric patterns.	Leveled work	Textbooks Math journals
17.2 Geometric Patterns	NCTM Algebra: Describe, extend and make generalizations about geometrics and numeric patterns.	Leveled work	Textbooks Blackline masters Pattern blocks
17.3 Number Patterns	NCTM Algebra: Describe, extend and make generalizations about geometrics and numeric patterns.	Leveled work	Math journals Textbooks Blackline masters
17.4 Problem Solving Workshop: Find a Pattern	NCTM Algebra: Represent and analyze patterns and functions, using words, tables and graphs.	Leveled work	Textbooks
17.5 Hands On: Make a Pattern	NCTM Algebra: Represent and analyze patterns and functions, using words, tables and graphs.	Leveled work	Pattern blocks Unifix cubes

Subject: Math

Grade: 3rd

Chapter/Outcome: Understand Fractions (18) Date Revised: February 2010

Section	Outcomes	Modifications	Resources
18.1 Model Part of a Whole	N.ME.03.16 Understand that fractions may represent a portion of a whole unit that has been partitioned into parts of equal area or length; use the terms "numerator" and "denominator."	Leveled work Use fraction tiles Use food Use the class as an example	Fraction tiles Pizza, M&Ms, etc
18.2 Model Part of a Group	N.ME.03.19 Understand that any fraction can be written as a sum of unit fractions, e.g., $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$.	Leveled work Manipulatives (marbles, etc)	Marbles or other materials
18.3 Equivalent Fractions	N.ME.03.17 Recognize, name and use equivalent	Leveled work Fraction tiles	Fraction tiles

	fractions with denominators 2, 4, and 8, using strips as area models.	Draw to explain lab	
18.4 Compare and Order Fractions	N.ME.03.18 Place fractions with denominators of 2, 4, and 8 on the number line; relate the number line to a ruler; compare and order up to three fractions with denominators 2, 4, and 8.	Leveled work Fraction tiles Replace <, >, = with words	Fraction tiles
18.5 Problem Solving Workshop Strategy: Compare Strategies	N.ME.03.18 Place fractions with denominators of 2, 4, and 8 on the number line; relate the number line to a ruler; compare and order up to three fractions with denominators 2, 4, and 8.	Leveled work	
18.6 Mixed Numbers	N.ME.03.18 Place fractions with denominators of 2, 4, and 8 on the number line; relate the number line to a ruler; compare and order up to three fractions with denominators 2, 4, and 8.	Leveled work Fraction circles	Fraction circles
18.7 Add Like Fractions	N.ME.03.19 Understand that any fraction can be written as a sum of unit fractions, e.g., $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$. N.MR.03.20 Recognize that addition and subtraction of fractions with equal denominators can be modeled by joining or taking away segments on the number line.	Leveled work Fraction tiles	Fraction tiles
18.8 Subtract Like Fractions	N.MR.03.20 Recognize that addition and subtraction of fractions with equal denominators can be modeled by joining or taking away segments on the number line.	Leveled work Fraction tiles	Fraction tiles
18.9 Problem	N.MR.03.20	Leveled work	

Solving Workshop Skill: Too Much/ Too Little Information	Recognize that addition and subtraction of fractions with equal denominators can be modeled by joining or taking away segments on the number line.	Fraction tiles	Fraction tiles
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Subject: Math

Grade: 3rd

Chapter/Outcome: Understand decimals (19)

Date Revised: February 2010

Section	Outcomes	Modifications	Resources
19.1 Model Tenths	NCTM Number and Operations: Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work	Textbooks Play money Base ten set, unifix cubes
19.2 Model Hundredths	NCTM Number and Operations: Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work	Textbooks Play money Base ten set
19.3 Decimals Greater than One	NCTM Number and Operations: Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work	Textbooks Play money Fraction set, unifix cubes
19.4 Compare and Order Decimals	NCTM Number and Operations: Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.	Leveled work	Fraction set Unifix cubes Decimal strips
19.5 Problem Solving Workshop Strategy: Compare Strategies	NCTM Problem Solving: Solve problems that arise in mathematics and in other countries.	Leveled work	Textbooks Math journals
19.6 Relate Fractions, Decimals, and Money	N.ME.03.21 Understand and relate decimal fractions to fractional parts of a dollar, e.g., 1/2 dollar = \$0.50; 1/4 dollar = \$0.25.	Leveled work	Play money Fraction pieces

Subject: Math

Grade: 3rd

Chapter/Outcome: Customary Measurement (20)

Date Revised: February 2010

Section	Outcomes	Modifications	Resources
20.1 Length	<p>M.UN.03.01 Know and use common units of measurements in length, weight and time.</p> <p>M.UN.03.03 Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters.</p> <p>M.UN.03.07 Distinguish between units of length and area and choose a unit appropriate in the context.</p>	Leveled work	Textbooks Standard measurement rulers yard sticks
20.2 Estimate and Measure Inches	<p>M.UN.03.02 Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months.</p> <p>N.ME.03.18 Place fractions with denominators of 2, 4, and 8 on the number line; relate the number line to a ruler; compare and order up to three fractions with denominators 2, 4, and 8.</p>	Leveled work	Rulers with inches Various objects to measure
20.3 Hands On: Estimate and Measure Feet and Yards	<p>M.UN.03.01 Know and use common units of measurements in length, weight and time.</p> <p>M.UN.03.02 Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months.</p> <p>M.UN.03.07 Distinguish between units of length and area and choose a unit appropriate in the context.</p>	Leveled work	Rulers with inches Yardsticks Objects to measure
20.4 Hands On: Capacity	<p>M.UN.03.03 Understand relationships between sizes of</p>	Leveled work	Textbooks Measuring containers (cup, pint,

<p>20.5 Weight</p>	<p>standard units, e.g., feet and inches, meters and centimeters.</p> <p>M.UN.03.01 Know and use common units of measurements in length, weight and time.</p> <p>M.UN.03.02 Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months.</p> <p>M.UN.03.03 Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters.</p>	<p>Leveled work</p>	<p>quart, gallon)</p> <p>Textbooks Standard weights (ounces, pounds) Pictures of objects that approximately match each weight</p>
<p>20.6 Estimate or Measure</p>	<p>NCTM Measurement: Understand that measurements are approximations and how differences in units affect precision.</p>	<p>Leveled work</p>	<p>Variety of objects or pictures of objects to estimate and measure their standard weights</p>
<p>20.7 Problem Solving Workshop Skill: Choose a Unit</p>	<p>M.UN.03.02 Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months.</p> <p>M.UN.03.03 Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters.</p> <p>M.UN.03.04 Know benchmark temperatures such as freezing, (32°F, 0°C); boiling, (212°F, 100°C); and compare temperatures to these, e.g., cooler, warmer.</p>	<p>Leveled work</p>	<p>Textbooks Blackline masters</p>
<p>20.8 Hands On: Fahrenheit Temperature</p>		<p>Leveled work</p>	<p>Thermometers with Fahrenheit and Celsius readings</p>

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Subject: Math

Grade: 3rd

Chapter/Outcome: Metric Measurement (21)

Date Revised: February 2010

Section	Outcomes	Modifications	Resources
21.1 Length	M.UN.03.01 Know and use common units of measurements in length, weight and time. M.UN.03.03 Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters. M.UN.03.07 Distinguish between units of length and area and choose a unit appropriate in the context.	Leveled work	Metric rulers Meter sticks
21.2 Estimate and Measure Centimeters, Decimeters, and Meters	M.UN.03.02 Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months.	Leveled work	Metric rulers Meter sticks Objects to estimate and measure
21.3 Hands On: Capacity	M.UN.03.02 Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months. M.UN.03.03 Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters. M.UN.03.01	Leveled work	Metric measuring containers (milliliter and liter)

21.4 Mass	Know and use common units of measurements in length, weight and time.	Leveled work	Metric weights (gram, kilogram)
21.5 Problem Solving Workshop Skill: Choose a Unit	<p>M.UN.03.02 Measure in mixed units within the same measurement system for length, weight and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months.</p> <p>M.UN.03.03 Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters.</p> <p>M.UN.03.07 Distinguish between units of length and area and choose a unit appropriate in the context.</p>	Leveled work	Textbooks Blackline masters
21.6 Hands On: Celsius Temperature	<p>M.UN.03.04 Know benchmark temperatures such as freezing, (32°F, 0°C); boiling, (212°F, 100°C); and compare temperatures to these, e.g., cooler, warmer.</p>	Leveled work	Thermometers with Celsius readings

Subject: Math

Grade: 3rd

Chapter/Outcome: Perimeter, Area, and Volume (22) Date Revised: February 2010

Section	Outcomes	Modifications	Resources
22.1 Estimate and Measure Perimeter	<p>M.UN.03.05 Know the definition of area and perimeter and calculate the perimeter of a square and rectangle given whole number side lengths.</p> <p>M.TE.03.09 Estimate the perimeter of a square and rectangle in inches and centimeters;</p>	Leveled work	Textbooks Blackline masters Rulers

22.2 Area of Plane Figures	<p>estimate the area of a square and rectangle and square inches and square centimeters.</p> <p>M.UN.03.05 Know the definition of area and perimeter and calculate the perimeter of a square and rectangle given whole number side lengths.</p> <p>M.UN.03.06 Use square units in calculating area by covering the region and counting the number of square units.</p> <p>M.UN.03.07 Distinguish between units of length and area and choose a unit appropriate in the context.</p>	Leveled work	Grid paper with plane figures drawn on paper
22.3 Relate Perimeter and Area	<p>M.UN.03.07 Distinguish between units of length and area and choose a unit appropriate in the context.</p>	Leveled work	Textbooks Grid paper with plane figures drawn on paper to calculate area and perimeter
22.4 Estimate and Find Volume	NCTM Measurement: Develop strategies to determine the surface areas and volumes of rectangular solids.	Leveled work	Textbooks Interlocking cubes to build models
22.5 Problem Solving Workshop Skill: Use a Model	NCTM Representation: Use representation to model and interpret physical, social, and mathematical phenomena.	Leveled work	Interlocking cubes to build models

Subject: Math Grade: 3rd

Chapter/Outcome: Multiply by 1 Digit (23)

Date Revised: February 2010

Section	Outcomes	Modifications	Resources
23.1 Algebra: Multiples of 10 and 100	N.FL.03.13 Mentally calculate simple products and quotients up to a three-digit number by a one-digit number involving multiples of	Leveled work	Textbooks Math journals

	10, e.g., 500×6 , or $400 \div 8$.		
23.2 Hands On: Arrays with Tens and Ones	NCTM Problem Solving: Apply and adapt a variety of appropriate strategies to solve problems.	Leveled work	Textbooks Math journals
23.3 Model 2-Digit Multiplication	NCTM Problem Solving: Apply and adapt a variety of appropriate strategies to solve problems.	Leveled work	Math journals Overhead projector
23.4 Estimate Products	NCTM Problem Solving: Apply and adapt a variety of appropriate strategies to solve problems.	Leveled work	Math journals Textbooks
23.5 Multiply 2-Digit Numbers	NCTM Number Operations: Select appropriate methods and tools for computing with whole numbers from among mental computation, estimation, calculators, and paper and pencil according to the context and nature of the computation and use selected method or tools.	Leveled work	Math journals Textbooks
23.6 Multiply 3-Digit Numbers	NCTM Number Operations: Select appropriate methods and tools for computing with whole numbers from among mental computation, estimation, calculators, and paper and pencil according to the context and nature of the computation and use selected method or tools.	Leveled work	Math journals Textbooks
23.7 Problem Solving Workshop Strategy: Solve a Simpler Problem	N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.	Leveled work	Textbooks Math journals

Subject: Math

Grade: 3rd

Chapter/Outcome: Divide by 1Digit (24) Date Revised: February 2010

Section	Outcomes	Modifications	Resources
24.1 Model Division with Remainders	NCTM Number and Operations: Understand various meanings of multiplication and division.	Leveled work	Textbooks Math journals Overhead projector
24.2 Record	NCTM Numbers and Operations: Understand the		

Division	effects of multiplying and dividing whole numbers.		Objects to divide
24.3 Algebra: Division Patterns	N.FL.03.13 Mentally calculate simple products and quotients up to a three-digit number by a one-digit number involving multiples of 10, e.g., 500×6 , or $400 \div 8$.	Leveled work	Math journals Blackline masters Textbooks
24.4 Estimate Quotients	N.FL.03.13 Mentally calculate simple products and quotients up to a three-digit number by a one-digit number involving multiples of 10, e.g., 500×6 , or $400 \div 8$.	Leveled work	Textbooks Math journals
24.5 Divide 2 and 3 Digit Numbers	NCTM Numbers and Operations: Understand the effects of multiplying and dividing whole numbers.	Leveled work	Math journals Textbooks
24.6 Problem Solving Workshop Skill: Interpret the Remainder	N.MR.03.14 Solve division problems involving remainders, viewing the remainder as the "number left over"; interpret based on problem context, e.g., when we have 25 children with 4 children per group then there are 6 groups with 1 child left over.	Leveled work	Textbooks Math journals Objects to divide