HAMILTON COMMUNITY SCHOOLS MATHEMATICS CURRICULUM Scott Foresman – Addison Wesley Mathematics: Grade 2

Chapter 1: Understanding Addition and Subtraction			
Lesson	Objective	GLCE	Comments
Section A – Understanding Addition			Please remember that our goal is computational fluence, which means having an immediate strategy to find an answer. Automaticity will come throughout multiple opportunities of using these strategies.
1-1 Joining Groups to Add	Join two groups together to find how many in all. I can join two groups together to find how many in all.	N.MR.02.09	Joining stories Count haw many in all Addition challenge with 10-frames - OAISD
1-2 Writing Addition Sentences	Join two groups together and write an addition sentence to tell how many in all. <i>I can join two groups together and write an</i> <i>addition sentence</i>	N.MR.02.09	Find some sums (Use 10-frame mats with the counters.) Introduce sum and addend as a verbal/visual card Identifying addends and sums Kew words in joining stories Crossing out sums
1-3 Write a Number Sentence	Solve a story problem by writing an addition sentence. <i>I can solve an addition story problem.</i>	N.MR.02.09	Note: Please use the think-aloud strategy with the problem solving question. Writing addition sentences (Inv.) (Use 10-frame mats with the counters.) Writing number sentences
Section Assessment	Section A Diagnostic Checkpoint p.11		

Section B – Understanding			
Subtraction			
1-4 Taking Away to Subtract	Take away a number of objects from a group and count to find how many are left.I can use objects to find how many are left.	N.MR.02.09	Stories about taking away (Use 10-frame mats with the counters.) Taking away to subtract
1-5 Comparing to Find How Many More	Compare two groups to find out how many more or how many fewer. <i>I can use objects to compare how many more or fewer.</i>	N.ME.02.03 N.MR.02.09	Comparing class information Comparing groups of counters (Use 10-frame mats with the counters.)
1-6 Writing Subtraction Sentences	Write subtraction sentences to solve both separation and comparison problems <i>I can write a subtraction sentence to solve problems.</i>	N.MR.02.09	Writing subtraction sentences (Both) Subtraction challenge with 10-frames - OAISD
1-7 Choose an Operation	Solve problems by choosing addition or subtraction. <i>I can use clue words to decide when to add or</i> <i>subtract.</i>	N.MR.02.09	Classifying vocabulary Deciding to add or subtract (Use 10-frame mats with the counters.)
Section Assessment	Section B Diagnostic Checkpoint p. 21		
Section C – Addition and Subtraction			
1-8 Adding in Any Order	Use the commutative property to find sums. I can add numbers in any order.	N.MR.02.09	Related facts Introduce related facts as a verbal/visual card Matching related facts Writing related facts
1-9 Ways to Make 10	Recognize facts that have sums of 10. I can find pairs that make a ten.	N.MR.02.08 N.MR.02.09	Ways to make 10 Write ways to make 10 Make 10 (Use 10-frame mats with the counters.) 10-frame flash Ask, "How many

			more to make 10?" - OAISD
1-10 Fact Families	Write the addition and subtraction sentences that make up a fact family. <i>I can write a fact family when given 3 numbers.</i>	N.MR.02.08 N.MR.02.09	Fact families Introduce fact family as a verbal/visual card Make fact families
1-11 Finding the Missing Part	Use counters to find the missing addend in an addition sentence. <i>I can use objects to find the missing addend.</i>	N.MR.02.08 N.MR.02.09	Write number sentences with missing parts How many are hiding? (Use 10-frame mats with the counters instead of cube trains.)
1-12 Frogs and Toads	Review and apply key concepts, skills, and strategies learned in this chapter and in previous grades	N.MR.02.09	Note: Please use the think-aloud strategy with the problem solving question. Hop to it!
Section Assessment	Section C Diagnostic Checkpoint p. 33		
Chapter Test			

Chapter 2 Fact Strategies for Addition and Subtraction			
Lesson	Objective	GLCE	Comments
Section A – Addition Strategies			
2-1 Counting On	Count on to add 1, 2, or 3 to another number I can use the count on strategy to add 1,2, or 3 to another number.	N.ME.02.01 N.MR.02.09 N.FL.02.10	Counting on Counting on to 20
2-2 Doubles Facts to 18	Recognize doubles as a strategy for remembering sums. <i>I can solve doubles.</i>	N.MR.02.09 N.FL.02.10	Double riddles Introduce doubles fact as a verbal/visual card Making doubles

2-3 Doubles Plus 1	Use doubles facts to learn doubles-plus-1 facts I can use doubles to solve doubles +1 facts	N.MR.02.09 N.FL.02.10	Doubles plus 1 facts (Use 10-frame mats with the counters.) Doubles and doubles plus 1 Introduce doubles plus 1 fact as a verbal/visual card
2-4 Using Strategies to Add Three Numbers	Find the sums of three addends. <i>I can add three addends.</i>	Supports flexible thinking and builds number sense	Adding three numbers Explaining addition strategies
2-5 Making 10 to Add 9	Find sums by making a 10 when adding a 9. I can make a ten when adding 9 to another addend.	N.MR.02.08 N.MR.02.09 N.FL.02.10	Note: This is a very important strategy for building computational fluency. Many adults naturally do this but don't realize it! Making 10 to add 9 Making groups of 10 Practice making 10
2-6 Making 10 to Add 7 or 8	Find sums by making a 10 when adding a 7 or an 8. <i>I can make a ten when adding 7 or 8 to another addend.</i>	N.MR.02.08 N.MR.02.09 N.FL.02.10	Making 10 to add 7 or 8 Steps for making 10 Making 10 (Use 10-frame mats with the counters.) Introduce make 10 as a verbal/visual card
2-7 Write a Number Sentence	Solve problems by writing number sentences. <i>I can write number sentences to solve a problem.</i>	N.ME.02.03 N.MR.02.09 N.FL.02.10	Writing a number sentence Who won?
Section Assessment	Section A Diagnostic Checkpoint p. 59		

Section B – Subtraction			
Strategies			
2-8 Counting Back	Use a number line to count back 1 or 2.	N.MR.02.07 N.FL.02.10	Understanding counting back
	<i>I can count back to solve a problem that takes away 1 or 2 from any number.</i>		 Remember: Students commonly want to count lines instead of the spaces. Stress that 1 is where they end up after the first bounce. Also, Subitizing is an important skill for reaching automaticity. Therefore, we eventually want to stretch our students to making a single jump of 1, 2, or 3, from the original number. Finally, for problems 1-8, have students place their right index finger on the beginning number and jump with their left index finger to identify the answer.
2-9 Thinking Doubles to Subtract	Find differences by using doubles facts <i>I can name the missing part of a double.</i>	N.MR.02.08 N.MR.02.09 N.FL.02.10	Using doubles to subtract Thinking doubles to subtract
2-10 Thinking Addition to Subtract	Find differences by using known addition facts <i>I can name and write the missing part of an</i> addition fact to subtract	N.MR.02.08 N.MR.02.09 N.FL.02.10	Using addition to subtract Matching related facts
2 11 Use Data from a Picture	Lise data in nictures to help find missing numbers		Missing numbers in story
	in number sentences	N.WIT.UZ.UO	problems What is the missing number
	I can fill in the missing numbers using pictures.		
2-12 Baby Birds	Review and apply key concepts, skills, and strategies learned in this and previous chapters.	N.MR.02.08 N.MR.02.09 N.FL.02.10	Practicing addition strategies (Model by playing teacher vs. the class and then have students play against each other.) Labeling strategies
Section Assessment	Section B Diagnostic Checkpoint p.71		

Section Assessment	Section B Diagnostic Checkpoint p.71		
Chapter Test			
	Chapter 3 Place Value to 100 a	nd Money	
Lesson	Objective	GLCE	Comments
Section A – Place Value to 100			
PD.M.PS.02.08			
3-1 counting with Tens and Ones	Count groups of ten, up to 10 tens, and write how many. <i>I can count groups of ten to 10 tens(100). I can</i> <i>write my tens to 100.</i>	N.ME.02.01 N.ME.02.02 N.ME.02.05	What number am I? (Use base 10 blocks as manipulatives.) Grouping counters
3-2 Using Tens and Ones	Use groups of tens and ones to show a given two- digit number. <i>I can show groups of tens and ones using base ten blocks.</i>	N.ME.02.01 N.ME.02.02 N.ME.02.05	Modeling numbers Matching place value (Use base 10 blocks)
3-3 Number Words	Read and write number words for given numbers. I can read and write number words correctly	N.ME.02.02	Reading and writing number words (Use place value cards to connect the standard form to expanded notationthis makes a stronger connection to the number word.) Introduce digits as a verbal/visual card
3-5 Comparing Numbers	Compare numbers using the greater-than, less- than, and equal-to symbols <i>I can compare numbers using the greater than,</i> <i>less than and equal sign correctly.</i>	N.ME.02.02 N.ME.02.03	Comparing numbers Introduce greater than, less than and equal to as verbal/visual cards True or false? (If necessary, use base 10 blocks, or little ten

3-6 Finding the Closest Ten	Use number line to determine the closest ten		
3-7 Before, After, and Between	Identify and write numbers that are one before, one after, or between given numbers. <i>I can say and write numbers that are one before,</i> <i>one after or between given numbers.</i>	N.ME.02.03	Number neighbors Introduce before, after and between as verbal/visual cards Before, after, and between clues
3-8 Skip Counting on the Hundred Chart	Recognize and extend skip-counting patterns. I can identify skip-counting patterns and extend the pattern.	N.ME.02.01 N.ME.02.04	Skip-count circles Completing skip-counting patterns Mix and match instructions
3-9 Even & Odd Numbers	Identify numbers as odd or even I can tell if a number is odd or even by looking at the ones place.		Not in our GLECs but has not been taught in K or 1 st .
3-11 Use Data from Chart (OPTIONAL)	Solve a problem by using clues and data from a chart.		
Section Assessment	Section B Diagnostic Checkpoint p. 107		
Section C - Money			
3-12 Dime, Nickel & Penny	Identify the value of a group of dimes, nickels, and pennies through 99 cents		
	I can count groups of pennies, nickels and dimes up to 99 cents		
3-13 Quarter & Half-Dollar	Count a collection of coins that includes half- dollars, quarters, dimes, nickels, and pennies		
	I can count a group of coins that include half- dollars, quarters, dimes, nickels and pennies.		
3-14 Counting Sets of Coins	Count a collection of coins that includes half- dollars, quarters, dimes, nickels, and pennies		
	I can count a group of coins that include half- dollars, quarters, dimes, nickels and pennies.		

3-15 Comparing Sets of Coins	Compare the values of two sets of coins	N.ME.02.03	Comparing coins Greater than/less than
	I can compare two sets of coins.		
3-16 Ways to Show the Same Amount	Show the same amount of money using different sets of coins.		
	I can show the same amount of money using different sets of coins.		
3-17 Make Change	Count on from the price of an object up to the greater amount paid in order to make change.		
	I can count on to make change.		
3-18 Dollar Bill and Dollar Coin	Identify the value of a dollar bill and a dollar coin.	M.UN.02.07 Note: Stress	Bank trades Classifying coin values
	I can tell the difference between a dollar bill and a dollar coin.	decimal notation	
Section Assessment	Section C Diagnostic Checkpoint p.125		
Chapter Tests - 2	Two separate test for money and place value So they can be recorded separately on report card		

Chapter 4 Mental Math: Addition and Subtraction			
Lesson	Objectives	GLCE	Comments
Section A – Addition Using Mental Math			
4-1 Adding Tens	Add a multiple of 10 to a two-digit number using models or mental math. <i>I can add groups of 10 to a two-digit numbers using</i> <i>blocks or mental math.</i>	N.MR.02.09 N.FL.02.10	Adding tens (Use base 10 blocks and place value mat.) Adding groups of ten
4-2 Adding Ones	Add a one-digit number to a two-digit number using models or mental math. <i>I can add a one-digit number to a two-digit number</i> <i>using blocks or mental math.</i>	N.MR.02.09 N.FL.02.10	Adding ones Making the next 10 Multiples of 10 children (Use a double ten frame mat.)
4-3 Adding Tens and Ones	Add a two-digit number to a two-digit number using models or mental math. <i>I can add a two-digit number to a two-digit number</i> <i>using blocks or mental math.</i>	N.MR.02.08. N.MR.02.09. N.FL.02.10	Adding tens and ones (Use base 10 blocks and place value mat.) Reading addition problems
4-4 Estimating Sums	Estimate the sum of 2 two-digit numbers. <i>I can estimate the sum of 2 two-digit numbers</i>	N.FL.02.11	Note: When estimating, student may choose to represent each number using only "tens". This forces them into choosing multiples of ten for each number before the find an estimate. Estimate or exact Introduce estimate as a verbal/visual card Making 50
Section Assessment	Section A Diagnostic Checkpoint p. 143		
Section B – Subtraction Using Mental Math			
4-5 Subtracting Tens	Subtract a multiple of 10 from a two-digit number using models or mental math. <i>I can subtract groups of 10 from a two-digit number</i> <i>using blocks or mental math.</i>	N.MR.02.09 N.FL.02.10	Subtracting tens (Use base 10 blocks and place value mat.) Finding the missing multiple

4-6 Subtracting Tens and Ones	Subtract a two-digit number from a two-digit number using models or mental math. <i>I can subtract a two-digit number from a two-digit</i> <i>number using blocks or mental math.</i>	N.MR.02.09 N.FL.02.10	Subtraction tens and ones (Use base 10 blocks and place value mat.) Drawing subtraction problems
Section Assessment	Section B Diagnostic Checkpoint p. 151		
Section C – Number Relationships			
4-8 Try, Check, and Revise	Solve a problem by finding pairs of numbers, the sums of which are a given multiple of 10. <i>I can solve a problem using the strategy of Try,</i> <i>Check, and Revise.</i>	N.FL.02.10	Try, check and revise Matching compatible numbers
4-10 Finding Parts of 100	Find the missing part of 100 when the given part is a multiple of 5 or 10. <i>I can find the missing part of 100.</i>	N.FL.02.06 N.FL.02.08	Finding parts of 100 Making one dollar
4-11 Look Back and Check	"Look back and check" is a strategy that can help confirm the solution to a problem. <i>I can look back and check to see if I have the</i> <i>correct answer to the problem.</i>	N.MR.02.09	Writing reasons Does it make sense?
Section Assessment	Section C Diagnostic Checkpoint p.163		
Chapter Test			

Chapter 5 Two-Digit Addition			
Lesson	Objective	GLCE	Comments
Section A – Adding Two- Numbers			
5-1 Adding With and Without Regrouping	Regroup 10 ones as 1 ten when adding. I can regroup 10 ones as 1 ten when adding.	N.MR.02.09 N.FL.02.10	Race to 100 – OAISD Introduce regroup as a verbal/visual card
5-2 Recording Addition	Add a one-digit number to a two-digit number, regroup, and record the process in the vertical format. <i>I can show how to add a one-digit number to a two- digit number in an up-and-down way.</i>	N.MR.02.09 N.FL.02.10	Recording the addition problem Overhead addition Explaining regrouping steps
5-3 Adding Two-Digit Numbers With and Without Regrouping	Use the standard algorithm to add 2 two-digit numbers with and without regrouping. <i>I can add 2 two-digit numbers with and without</i> <i>regrouping</i>	N.MR.02.09 N.FL.02.10	Regroup 10 ones for 1 ten (Use base 10 blocks and place value mat.) Identifying when to regroup
5-4 Practice with Two-Digit Addition	Use the standard algorithm symbolically to add two- digit numbers with and without regrouping. <i>I can add 2 two-digit numbers with and without</i> <i>regrouping</i>	N.FL.02.10	Adding two-digit numbers on paper Quick addition
Section Assessment	Section A Diagnostic Checkpoint p. 183		Note: If some students are struggling with the abstractness of the standard algorithm, use the place value mat and recording sheet to help them with the partial sums algorithm. This is much more concrete and highly recommended to develop understanding for recording two- digit addition.
Section B – Using Addition			
5-5 Adding Money	Add two money amounts (less than \$1.00) using paper and pencil.	N.FL.02.10 M.PS.02.10	Money counts Adding up classroom items

	I can add two money amounts (less than \$1.00) and add them using pencil and paper.		
5-7 Use Data From a Table	Solve problems involving addition by using data from a table.	N.FL.02.10	Using data from a table True or False
5-10 Try, Check, and Revise	Solve a problem by estimating, checking the estimate, and then revising the estimate until the final answer is reached. <i>I can solve a problem by estimating and check the</i> <i>answer. I try again until I get the right answer.</i>	N.FL.02.10 M.PS.02.10	Shape shopping for the target Amount
5-11 The Wonderful World of	Review and apply key concepts, skills, and	N.MR.02.09	Calling all numbers
Plants (Optional)	strategies learned in this and previous chapters.	N.MR.02.16	Phone number math
Section Assessment	Section B Diagnostic Checkpoint p. 201		
Chapter Test			

Chapter 6 Two-Digit Subtraction			
Lesson	Objective	GLCE	Comments
Section A – Subtracting Two- Digit Numbers			
6-1 Subtracting With and Without Regrouping	Regroup 1 ten as 10 ones when subtracting. I can regroup 1 ten as 10 ones when subtracting.	N.MR.02.09	Race to 100 – OAISD To regroup or not to regroup (Use base 10 blocks and place value mat.) Note: For "Learn!" and student practice, have students model each problem with base 10 blocks and a place value mat.)
6-2 Recording Subtraction	Subtract a one-digit number from a two-digit number with or without regrouping using the standard algorithm. <i>I can subtract a one-digit from a two-digit number</i> <i>with or without regrouping.</i>	N.MR.02.09 N.FL.02.10	Writing the subtraction problem (Use base 10 blocks and place value mat.) Recording subtraction problems
6-3 Subtracting Two-Digit Numbers With and Without Regrouping	Use the standard subtraction algorithm to subtract a two-digit number from another two-digit number. I can subtract a one-digit from a two-digit number with or without regrouping.	N.MR.02.09 N.FL.02.10	Subtracting two-digit numbers (Use base 10 blocks and place value mat.) Comparing regrouped numbers (Use base 10 blocks)
6-4 Practice with Two-Digit Subtraction	Use the standard subtraction algorithm symbolically to subtract a two-digit number from another two- digit number. <i>I can subtract a one-digit from a two-digit number</i> <i>with or without regrouping.</i>	N.FL.02.10	Showing two ways to solve The next step
6-5 Write a Number Sentence	Solve problems by writing number sentences. <i>I can solve problems by writing number sentences.</i>	N.MR.02.09	Using key words What are the facts
Section Assessment	Section A Diagnostic Checkpoint p. 223		

Section B – Using Subtraction			
6-6 Subtracting Money	Subtract amounts of money less than \$1.00 with and without regrouping.	N.FL.02.10 M.PS.02.10	Making sense Transactions with money
	<i>I can subtract amounts of money less than \$1.00 with and without regrouping.</i>		
6-7 Using Addition to Check Subtraction	Relate addition to subtraction by using one operation to check the other.	N.MR.02.08 N.FL.02.10	Check-up Check yourself
6-10 Extra Information	Solve two-digit addition and subtracting problems after identifying and eliminating extra information. <i>I can choose important information in a problem.</i> <i>I can solve problems with addition and subtraction.</i>	N.MR.02.09	What do you do with extra information? (Don't spend too much time on the word "information". This section really focuses on understanding the problem with the questions, "What do you know?", "What do you need to find? and determine if they know more than they need. Checking number sentences
6-11 Here Kitty, Kitty! (Optional)	Review and apply the concepts, skills, and strategies learned in this and previous chapters.	N.MR.02.09 N.MR.02.16	Nouns, verbs, and numbers Matching addition and subtraction problems
Section Assessment	Section B Diagnostic Checkpoint p. 237		
Chapter Test			

Chapter 7 Geometry and Fractions			
Lesson	Objective	GLCE	Comments
PD.02.20			
Section A – Solid Figures			
7-1 Flat Surfaces, Vertices, and Edges	Identify solid figures (cone, cube, cylinder, pyramid, rectangular prism, sphere) and count their flat surfaces, vertices, and edges. <i>I can identify solid figures (3-d figures) and count</i> <i>their flat surfaces, vertices, and edges.</i>	G.GS.02.01 G.GS.02.04 G.GS.02.05 G.SR.02.05	Introduce solid figure, cube, rectangular prism, sphere, pyramid, cylinder, cone, flat surfaces, vertex (vertices) and edge as verbal/visual cards Categorizing shapes (Match each solid figure with it's name card. Then, observe each item to complete the table. Word wall games - OAISD
7-2 Relating Plane Shapes to Solid Figures	Match a geometric solid to an outline of one of its flat surfaces and match that flat surface to a plane shape. <i>I can match a geometric solid(3-d shape) to an</i> <i>outline of its flat surfaces and match that flat surface</i> <i>to a plane shape (2-d shape).</i>	G.GS.02.02	
Section Assessment	Section A Diagnostic Checkpoint p. 253		
7-5 Congruence	Identify and create congruent figures <i>I can find and make congruent shapes.</i>		Not a GLEC but must be taught
7-6 Slides, Flips, and Turns	Perform a slide, flip, or turn on an object and identify the resulting orientation. <i>I can perform a slide, flip, or turn of an object.</i>	G.TR.02.06	Showing slides, flips and turns Introduce slide, flip and turn as verbal/visual cards
7-7 Symmetry	Identify and create symmetrical shapes I can name and create symmetrical shapes.		Not a GLEC but must be taught
7-8: Use Logical Reasoning	Solve a problem by using logical reasoning.	G.GS.02.01 G.SR.02.05	Note: Use 2 and 3-dimensional objects with the following activities. Follow the clues Use the clues

			Reasoning with clues
Section Assessment	Section B Diagnostic Checkpoint p. 267		
Section C - Fractions			
7-9 Equal Parts	Determine whether a shape has been divided into equal or unequal parts; identify halves, thirds, and fourths. <i>I can decide if a shape has been divided into equal</i> <i>or unequal parts.</i> <i>I can identify halves, thirds and fourths.</i>	N.ME.02.21 N.ME.02.22	Folding equal parts Introduce equal, halves, thirds, fourths and unequal as verbal/visual cards (Still need unequal) Note: Need to use equal size areas and discuss how the unit fraction becomes smaller as the denominator gets larger. (N.ME.02.21) Equal or unequal parts Creating equal parts
7-10 Unit Fractions	Identify and show a unit fraction of a region. I can identify a fraction.	N.ME.02.18 N.ME.02.19	Folding fractions Introduce fraction and unit fraction as a verbal/visual cards Unit fractions
7-11 Non-Unit Fractions	Identify and show any fraction of a region.	N.ME.02.19	Folding more fractions Parts of a fraction Shading fractions
Section Assessment	Section C Checkpoint p. 281		
Chapter Test – 2	Two separate tests for Geometry and Fractions so they can be recorded separately for report cards		
	Chapter 8 Time, Data, and (Graphs	
Lesson	Objective	GLCE	Comments
Section A – Telling Time			
8-1 Telling Time to Five Minutes	Tell time to five-minute intervals. <i>I can tell time to five-minutes.</i>	M.UN.02.05	Five minutes at a time Introduce hour hand, minute hand, hour and minute as verbal/visual cards Comparing times
8-2 Telling Time After the Hour	Tell time after the hour.	M.UN.02.05	Sometime after the hour Note: M.UN.02.05 focuses on how

	I can tell how many minutes it is after the hour.		many minutes before or after the hour, not quarter to and half past the hour. Many ways to tell time Setting times past the hour
8-3 Telling Time Before the	Tell time before the hour.	M.UN.02.05	What is the time before the hour?
Hour	I can tell how many minutes it is before the next hour.		Time clues Which does not belong?
8-4 Estimating Time	Estimate whether an activity takes minutes, hours, or days to complete. <i>I can estimate if an activity takes minutes, hours, or</i> <i>days.</i>	M.UN.02.06	It's about time True estimates of time How many minutes
8-5 Elapsed Time	Determine the amount of time that passes between the start of an event and the end of an event, and determine the ending time when given the elapsed time. -I can tell the amount of time that passes between the start of an event and the end of an event. -I can find the ending time when given the elapsed time.	M.UN.02.05 M.UN.02.06	How much time has passed? Time riddles Before and after
8-6 A.M. and P.M.	Determine whether events occur in the A.M. or P.M. hours. <i>I can tell if events happen in the A.M. or P.M.</i>	M.UN.02.05	Before noon and after noon Organizing time vocabulary Closer to noon or midnight
Section Assessment	Section A Diagnostic Checkpoint p.307		
Section C - Graphs			
8-9 Making a table	Solve a problem by making a table		
	I can solve a problem by making a table.		
8-12 Pictographs	Create and analyze data using a pictograph. -I can make a pictograph. -I can read a pictograph using the (key, scale, symbol.)	D.RE.02.01 D.RE.02.02 D.RE.02.03	Make a pictograph (Instead of tracing their hands, children could stick post-it notes on the chart to speed up the process.) Introduce pictograph as a verbal/visual cards Translating data to pictures

8-12 Pictographs	Create and analyze data using a pictograph. <i>-I can make a pictograph.</i> <i>-I can read a pictograph using the (key, scale, symbol.)</i>	D.RE.02.01 D.RE.02.02 D.RE.02.03	Make a pictograph (Instead of tracing their hands, children could stick post-it notes on the chart to speed up the process.) Introduce pictograph as a verbal/visual cards Translating data to pictures Note: Based on D.RE.02.03, half pictures like in "Odd numbers on a pictograph aren't intended for all children.
8-15 Coordinate Graphs	Locate and name points on a coordinate grid. I can locate and name points on a coordinate grid/graph.	G.LO.02.07	Make a coordinate graph Graphing geometric shapes
8-16 Use Data from a Graph	Solve problems using data from a pictograph and a bar graph.	D.RE.02.01	The graph has answers
	<i>I can solve problems using a pictograph and bar graph.</i>	D.RE.02.03	Making predictions from a graph
8-17 Fly, Butterfly, Fly!	Review and apply key concepts, skills, and strategies learned in this and previous chapters.	N.MR.02.09	Practicing time
(Optional)		M.UN.02.05	Creating questions

Chapter 9 Measurement and Probability			
Lesson	Objective	GLCE	Comments
Section A - Length			
9-2 Inches and Feet	Estimate and measure the lengths or heights of objects in inches or feet, using a ruler. I can estimate and measure the length or height of an object in inches or feet.	M.UN.02.01	Inches and feet Introduce inch, inch ruler and foot as verbal/visual cards Ordering feet and inches Classifying lengths
9-3 Inches, Feet, and Yards	Estimate and measure the lengths or heights of objects in inches, feet, or yards, using a ruler. I can estimate and measure the length or height of an object in inches, feet, or yards.	M.UN.02.01	Inches, feet and yards Introduce yardstick and yard as verbal/visual cards Measurement similarities
9-4 Centimeters and Meters	Estimate and measure lengths in centimeters and meters, using a centimeter ruler or a meter stick. I can estimate and measure the length of height of an object in centimeters and meters.	M.UN.02.01	Centimeters and meters Introduce centimeter and meter as verbal/visual cards Measuring meters Choose a unit
9-5 Act It Out	Solve problems involving area and perimeter by acting them out. <i>I can find the perimeter of a shape.</i> <i>I can find the area of a shape.</i>	M.UN.02.03 M.TE.02.04 G.GS.02.03	Note: M.UN.02.04 only refers to area, not perimeter. It is OK to introduce perimeter in this section, but spend more time and energy mastering area concepts. Perimeter and Area Introduce perimeter, area and square units as verbal/visual cards Identifying perimeter and area Drawing area and perimeter
Section B - Temperature			
9-13 Temperature: Fahrenheit and Celsius	Show, read, and write temperatures shown on Fahrenheit and Celsius thermometers. <i>I can read the temperature on a thermometer.</i>	M.UN.02.09	Hot or cold? Introduce temperature, degrees Fahrenheit and degrees Celsius as verbal/visual cards Celsius or Fahrenheit? Equivalent temperatures

Section Assessment	Section B Diagnostic Checkpoint p. 371		
Section C Probability			
9-16 Multiple-Step Problems	Solve multiple-step problems involving addition and subtraction. <i>I can solve problems with addition and subtraction that have more than one step.</i>	N.FL.02.10	Note: Please continue to use the problem solving questions. Solving multiple-step problems Creating two-step problems
Section Assessment	Section C Diagnostic Checkpoint p.381		
Chapter Test			
	Chapter 10 Numbers to 1	,000	
Section A - Place Value			
Lesson	Objective	GLCE	Comments
10-1 Building 1,000	Count by hundreds to 1,000.	N.ME.02.01 N.ME.02.02	1,000 Xs Matching numbers to 1,999
10-2 Counting Hundreds, Tens, and Ones	Count sets grouped in hundreds, tens, and ones. <i>I can count sets grouped in hundreds, tens, and ones.</i> <i>ones.</i>	N.ME.02.01 N.ME.02.02 N.ME.02.05	Mixed-up places Introduce digit as a verbal/visual cards Matching and counting numbers (Use place value cards to help build understanding for the meaning of the digits.)
10-3 Writing Numbers to 1,000	Read and write three-digit numbers using expanded form, standard form, and number words. <i>I can read and write three-digit numbers using</i> <i>expanded form, standard form, and number words.</i>	N.ME.02.02 N.ME.02.05	Different representations Introduce number word (or word form), expanded form and standard form as verbal/visual cards Represent different numbers using the place value GO (graphic organizer) sheet.
10-4 Changing Numbers by Hundreds and Tens	Add and subtract multiples of 10 or 100 to and from a three-digit number without regrouping. <i>I can add and subtract multiples of 10 or 100 from a</i> <i>three-digit number without regrouping</i> .	N.ME.02.02 N.ME.02.05 N.FL.02.12	Tens and hundreds, more or less? More than and less than

10-5 Comparing Numbers	Compare three-digit numbers using the symbols <, >, and =. <i>I can compare three-digit numbers using the symbols <,>, and =.</i>	N.ME.02.03	Spin to compare Math synonyms Let's compare numbers
10-6 Parts of 1,000	Use counting on to find missing parts of 1,000. <i>I can use counting on to find the missing number to</i> <i>1.000.</i> <i>I can estimate the sum of two numbers with three-</i> <i>digits.</i>	N.ME.02.01 N.FL.02.11 N.MR.02.08	Finding parts of 1,000 Deciding how to count on (Have a number line from 0 to 1000 and intervals of 50 available for students to look at.
Section Assessment	Section A Diagnostic Checkpoint p. 403		
Section B Number Patterns			
10-8 Before, After, and Between	Identify numbers, that are before, after, or between given numbers <i>I can identify numbers, that are before, after, or</i> <i>between given numbers.</i>	N.ME.02.03	Hundred chart bingo Before, after, between chart
10-9 Ordering Numbers	Order three-digit numbers from greatest to least and from least to greatest. <i>I can order three-digit numbers from greatest to</i> <i>least and least to greatest, and use the <, ></i> <i>symbols.</i>	N.ME.02.03	Order, order! Introduce order as a verbal/visual cards Ordering and reordering numbers Identify least and greatest
10-10 Look for a Pattern	Continue number patterns using three-digit numbers and skip count by different amounts <i>I can continue number patterns using three-digit</i> <i>numbers and skip count by different amounts.</i>	N.ME.02.01 N.ME.02.03	Make a pattern Identifying the pattern Finding Patterns
10-11 Rescue Vehicles (Optional)	Review and apply key concepts, skills, and strategies learned in this and previous chapters.	N.ME.02.03 N.ME.02.05 N.FL.02.12 M.UN.02.05	Changing words into numbers Ordering solutions
Section Assessment	Section B Diagnostic Checkpoint p.417		

Chapter Test		

Chapter 11 Addition and Subtraction of Three-Digit Numbers			
Section A - Addition			
Lesson	Objective	GLCE	Comments
11-2 Estimating Sums	Decide whether the sum of 2 three-digit numbers is more or less than a given number. I can decide whether the sum of 2 three-digit numbers is more of less than a given number.	N.FL.02.11	Three-digit target sums Introduce estimate as a verbal/visual card Estimating strategies Estimating a sum's location
11-4 Adding Three-Digit Numbers	Use paper and pencil to add 2 three-digit numbers with one regrouping. <i>I can use paper and pencil to add 2 three-digit</i> <i>numbers.</i>		
11-5 Practice with three-digit numbers (OPTIONAL)			
Section Assessment	Section A Diagnostic Checkpoint p. 441		
Section B - Subtraction			
11-7 Ways to Find Missing Parts	Given a quantity and one of its parts, find the missing part by counting on or counting back. <i>I can find a missing part of a math problem.</i>	N.ME.02.01 N.MR.02.08 N.FL.02.12	Find the missing part Count on to find missing parts (Note: For 170 + = 240, a more efficient strategy is having students jump to the nearest hundred (30 more to get to 200) and then add the left over. (plus 40 more = 70) Missing part pattern
11-10 Subtract Three-Digit Numbers	Use standard algoritm to subtract three-digit numbers with regrouping.		

	I can subtract three-digit numbers with regrouping.			
11-11 Practice with three-digit				
numbers (OPTIONAL)				
11-13 Amazing Animais	Review and apply key concepts, skills, and	N.FL.02.10	Animai story problems	
(Optional)	strategies learned in this and previous chapters.	N.FL.02.11		
		N.FL.02.12 MUN 02.06		
Section Assessment	Section B Diagnostic Ckeckpoint p. 457	101.010.02.00		
	Cecilon B Blaghostic Okeekpoint p. 407			
Section Assessment	Section B Diagnostic Ckeckpoint p. 457			
Chanter Assessment	Chanter Test n. 463-464			
Chapter Assessment				
Chapter 12 Understanding Multiplication and Division				
Section A Understanding	· · · · ·			
Multiplication				
Lesson	Objective	GLCE	Comments	
12-1 Skip Counting Equal	Make equal groups of objects and then find the total	N.MR.02.13	Skip counting groups	
Groups	number of objects in those groups.	N.MR.02.14	Introduce equal groups as a	
		N.MR.02.16.	verbal/visual card	
	I can make equal groups of objects and then find the			
	total number of objects in those groups.			
12-2 Repeated Addition and	Write equivalent repeated-addition and multiplication	N.MR.02.13	Linking addition and multiplication	
Multiplication	number sentences.	N.WR.02.16	multiplication contance as	
	Lean write repeated addition and multiplication		worbal/visual card	
	sentences		Reading multiplication and addition	
	Semences.		Sentences	
12-3 Building Arrays	Build an array to model a multiplication situation.	N.MR.02.13	Equal rows	
		N.MR.02.14	Introduce array and factors as	
	I can build an array to show a multiplication	N.MR.02.16	verbal/visual cards	
	situation.		Array riddles	
			Finding all the arrays	
12-4 Multiplying in Any Order	Multiply numbers in any order to get the same	N.MR.02.13	I urning arrays	
		N. WIK.UZ. 14	The last rectangle OAISD	
	I can multiply numbers in any order to get the same	N FL 02 17		
	product.			

12-5 Vertical Form	Multiply numbers written in vertical format.	N.MR.02.13.	Vertical multiplication
	I can multiply numbers written in a vertical form	N.MR.02.16 N FL 02 17	Two forms of multiplication
12-6 Draw a Picture	Solve a problem by drawing a picture.	N.MR.02.13	Drawing multiplication
		N.MR.02.16	Picture solutions
	I can solve a problem by drawing a picture, using	N.FL.02.17	Matching pictures and problems
	words, objects, or symbols.		
Section Assessment	Section A Diagnostic Checkpoint p. 481		
Section B - Understanding			
Division			
12-7 Making Equal Grou ps	Divide a set of objects into a given number of equal	N.MR.02.15	Sharing pennies Pasta sharos
	gloups.	N.IVIA.02.10	rasia silales
	I can divide a set of objects into a given number of		
	equal groups.		
	I can show that division "undoes" multiplication.		
12-8 Writing Division Sentences	write a division sentence to represent a sharing	N.MR.02.16	Recording division
			sentence as verbal/visual card
	I can write a division sentence to represent a		Division pictures
	sharing situation.		The last rectangle (Division) –
			OAISD
12-9 Choose an Operation	Choose a number sentence to represent a problem	N.MR.02.16	Add, subtract, multiply, or divide?
	situation.	N.MR.02.09	Naming the action (Complete the
	I can choose a number sentence to represent a		graphic organizer by
	problem situation.		brainstorming synonyms for each
			operation.
12-10 Up, Up, and Away!	Review and apply key concepts, skills, and	N.MR.02.09	Mix and match problems
(Optional)	strategies learned in this and previous chapters.	N.MR.02.16	Match the operation
Conting Appagement	Castian D. Diagnastic Checknoint n. 404	N.FL.02.17	Story-Problem arrays
Section Assessment	Section B Diagnostic Uneckpoint p. 491		
Chapter Test			