## HAMILTON COMMUNITY SCHOOLS MATHEMATICS CURRICULUM

Scott Foresman - Addison Wesley Mathematics: Grade 2

| Chapter 1: Understanding Addition and Subtraction |  |  |  |
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| 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. <br> I can join two groups together and write an addition sentence | N.MR.02.09 | Find some sums (Use 10-frame mats with the counters.) Introduce sum and addend as a verbal/visual card <br> 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. <br> I can solve an addition story problem. | N.MR.02.09 | Note: Please use the think-aloud strategy with the problem solving question. <br> Writing addition sentences (Inv.) (Use 10-frame mats with the counters.) <br> 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. <br> 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.) <br> 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. <br> I can use objects to compare how many more or fewer. | $\begin{aligned} & \hline \text { N.ME. } 02.03 \\ & \text { N.MR. } 02.09 \end{aligned}$ | 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 <br> I can write a subtraction sentence to solve problems. | N.MR.02.09 | Writing subtraction sentences (Both) <br> Subtraction challenge with 10-frames - OAISD |
| 1-7 Choose an Operation | Solve problems by choosing addition or subtraction. <br> I can use clue words to decide when to add or subtract. | 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. | $\begin{aligned} & \hline \text { N.MR. } 02.08 \\ & \text { N.MR. } 02.09 \end{aligned}$ | Ways to make 10 <br> Write ways to make 10 <br> Make 10 <br> (Use 10-frame mats with the counters.) <br> 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. <br> I can write a fact family when given 3 numbers. | $\begin{aligned} & \text { N.MR. } 02.08 \\ & \text { N.MR.02.09 } \end{aligned}$ | 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. <br> I can use objects to find the missing addend. | $\begin{aligned} & \hline \text { N.MR. } 02.08 \\ & \text { N.MR.02.09 } \end{aligned}$ | Write number sentences with missing parts <br> How many are hiding? <br> (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. <br> 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 <br> Strategies | Count on to add 1, 2, or 3 to another number | N.ME.02.01 <br> N.MR.02.09 <br> I can use the count on strategy to add 1,2, or 3 to <br> another number. | Counting on <br> Counting on to 20 |
| 2-1 Counting On | Recognize doubles as a strategy for remembering <br> sums. | N.MR.02.09 <br> N.FL.02.10 | Double riddles <br> Introduce doubles fact as a <br> verbal/visual card <br> Making doubles |
| 2-2 Doubles Facts to 18 | I can solve doubles. |  |  |

$\left.\begin{array}{|l|l|l|l|}\hline \text { 2-3 Doubles Plus 1 } & \begin{array}{l}\text { Use doubles facts to learn doubles-plus-1 facts } \\ \text { I can use doubles to solve doubles }+1 \text { facts }\end{array} & \begin{array}{l}\text { N.MR.02.09 } \\ \text { N.FL.02. } 10\end{array} & \begin{array}{l}\text { Doubles plus } 1 \text { facts } \\ \text { (Use } 10 \text {-frame mats with the } \\ \text { counters.) }\end{array} \\ \text { Doubles and doubles plus } 1 \\ \text { Introduce doubles plus } 1 \text { fact as } \\ \text { a verbal/visual card }\end{array}\right]$

| Section B - Subtraction Strategies |  |  |  |
| :---: | :---: | :---: | :---: |
| 2-8 Counting Back | Use a number line to count back 1 or 2. <br> I can count back to solve a problem that takes away 1 or 2 from any number. | $\begin{aligned} & \text { N.MR.02.07 } \\ & \text { N.FL.02.10 } \end{aligned}$ | Understanding counting back <br> Remember: Students commonly want to count lines instead of the spaces. Stress that 1 is where they end up after the first bounce. <br> 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. <br> 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 can name the missing part of a double. | $\begin{aligned} & \text { N.MR.02.08 } \\ & \text { N.MR.02.09 } \\ & \text { N.FL.02.10 } \end{aligned}$ | Using doubles to subtract Thinking doubles to subtract |
| 2-10 Thinking Addition to Subtract | Find differences by using known addition facts <br> I can name and write the missing part of an addition fact to subtract. | $\begin{aligned} & \hline \text { N.MR.02.08 } \\ & \text { N.MR.02.09 } \\ & \text { N.FL.02.10 } \end{aligned}$ | Using addition to subtract Matching related facts |
| 2-11 Use Data from a Picture | Use data in pictures to help find missing numbers in number sentences <br> I can fill in the missing numbers using pictures. | N.MR.02.08 | Missing numbers in story problems <br> What is the missing number |
| 2-12 Baby Birds | Review and apply key concepts, skills, and strategies learned in this and previous chapters. | $\begin{aligned} & \text { N.MR.02.08 } \\ & \text { N.MR.02.09 } \\ & \text { N.FL. } 02.10 \end{aligned}$ | Practicing addition strategies (Model by playing teacher vs. the class and then have students play against each other.) <br> Labeling strategies |
| Section Assessment | Section B Diagnostic Checkpoint p. 71 |  |  |


| Section Assessment | Section B Diagnostic Checkpoint p.71 |  |  |
| :--- | :--- | :--- | :--- |
| Chapter Test |  |  |  |


| 3-6 Finding the Closest Ten | Use number line to determine the closest ten I can use a number line to find the closest ten. |  |  |
| :---: | :---: | :---: | :---: |
| 3-7 Before, After, and Between | Identify and write numbers that are one before, one after, or between given numbers. <br> I can say and write numbers that are one before, one after or between given numbers. | 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. <br> I can identify skip-counting patterns and extend the pattern. | $\begin{aligned} & \hline \text { N.ME.02.01 } \\ & \text { N.ME.02.04 } \end{aligned}$ | Skip-count circles Completing skip-counting patterns Mix and match instructions |
| 3-9 Even \& Odd Numbers | Identify numbers as odd or even <br> 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 $1^{\text {st }}$. |
| 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 <br> 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 halfdollars, quarters, dimes, nickels, and pennies <br> I can count a group of coins that include halfdollars, quarters, dimes, nickels and pennies. |  |  |
| 3-14 Counting Sets of Coins | Count a collection of coins that includes halfdollars, quarters, dimes, nickels, and pennies <br> I can count a group of coins that include halfdollars, quarters, dimes, nickels and pennies. |  |  |


| 3-15 Comparing Sets of Coins | Compare the values of two sets of coins I can compare two sets of coins. | N.ME.02.03 | Comparing coins Greater than/less than |
| :---: | :---: | :---: | :---: |
| 3-16 Ways to Show the Same Amount | Show the same amount of money using different sets of coins. <br> 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. <br> 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. I can tell the difference between a dollar bill and a dollar coin. | M.UN. 02.07 <br> Note: Stress decimal notation | Bank trades Classifying coin values |
| 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. <br> I can add groups of 10 to a two-digit numbers using blocks or mental math. | $\begin{aligned} & \text { N.MR. } 02.09 \\ & \text { N.FL.02.10 } \end{aligned}$ | ```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. <br> I can add a one-digit number to a two-digit number using blocks or mental math. | $\begin{aligned} & \text { N.MR. } 02.09 \\ & \text { N.FL.02.10 } \end{aligned}$ | Adding ones <br> Making the next 10 <br> 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. <br> I can add a two-digit number to a two-digit number using blocks or mental math. | $\begin{aligned} & \text { N.MR.02.08. } \\ & \text { N.MR.02.09. } \\ & \text { N.FL.02.10 } \end{aligned}$ | Adding tens and ones (Use base <br> 10 blocks and place value mat.) Reading addition problems |
| 4-4 Estimating Sums | Estimate the sum of 2 two-digit numbers. <br> I can estimate the sum of 2 two-digit numbers | 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. <br> Estimate or exact <br> Introduce estimate as a verbal/visual card <br> 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. <br> I can subtract groups of 10 from a two-digit number using blocks or mental math. | $\begin{aligned} & \text { N.MR. } 02.09 \\ & \text { N.FL.02.10 } \end{aligned}$ | 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 <br> number using models or mental math. <br> I can subtract a two-digit number from a two-digit <br> number using blocks or mental math. | N.MR.02.09 <br> N.FL.02.10 | Subtraction tens and ones <br> (Use base 10 blocks and place <br> value mat.) <br> Drawing subtraction problems |
| :--- | :--- | :--- | :--- |
| Section Assessment | Section B Diagnostic Checkpoint p. 151 |  |  |
| Section C - Number <br> Relationships | Solve a problem by finding pairs of numbers, the <br> sums of which are a given multiple of 10. <br> I can solve a problem using the strategy of Try, <br> Check, and Revise. | N.FL.02.10 | Try, check and revise <br> Matching compatible numbers |
| 4-10 Finding Parts of Revise 100 | Find the missing part of 100 when the given part is <br> a multiple of 5 or 10. | N.FL.02.06 <br> N.FL.02.08 | Finding parts of 100 <br> Making one dollar |
| I can find the missing part of 100. |  |  |  |
| Section Assessment | "Look back and check" is a strategy that can help <br> confirm the solution to a problem. | N.MR.02.09 | Writing reasons <br> Does it make sense? |
| I can look back and check to see if I have the |  |  |  |
| correct answer to the problem. |  |  |  |


| Chapter 5 Two-Digit Addition |  |  |  |
| :---: | :---: | :---: | :---: |
| Lesson | Objective | GLCE | Comments |
| Section A - Adding TwoNumbers |  |  |  |
| 5-1 Adding With and Without Regrouping | Regroup 10 ones as 1 ten when adding. <br> I can regroup 10 ones as 1 ten when adding. | $\begin{aligned} & \hline \text { N.MR.02.09 } \\ & \text { N.FL.02.10 } \end{aligned}$ | 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. <br> I can show how to add a one-digit number to a twodigit number in an up-and-down way. | $\begin{aligned} & \hline \text { N.MR. } 02.09 \\ & \text { N.FL. } 02.10 \end{aligned}$ | 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. <br> I can add 2 two-digit numbers with and without regrouping | $\begin{aligned} & \text { N.MR. } 02.09 \\ & \text { N.FL.02.10 } \end{aligned}$ | Regroup 10 ones for 1 ten (Use base 10 blocks and place value mat.) <br> Identifying when to regroup |
| 5-4 Practice with Two-Digit Addition | Use the standard algorithm symbolically to add twodigit numbers with and without regrouping. <br> I can add 2 two-digit numbers with and without regrouping | 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 twodigit addition. |
| Section B - Using Addition |  |  |  |
| 5-5 Adding Money | Add two money amounts (less than \$1.00) using paper and pencil. | $\begin{aligned} & \text { N.FL. } 02.10 \\ & \text { M.PS.02.10 } \end{aligned}$ | Money counts Adding up classroom items |


|  | I can add two money amounts (less than \$1.00) <br> and add them using pencil and paper. |  |  |
| :--- | :--- | :--- | :--- |
| 5-7 Use Data From a Table | Solve problems involving addition by using data <br> from a table. <br> I can read a table and solve a problem. | N.FL.02.10 | Using data from a table <br> True or False |
| 5-10 Try, Check, and Revise | Solve a problem by estimating, checking the <br> estimate, and then revising the estimate until the <br> final answer is reached. <br> I can solve a problem by estimating and check the <br> answer. I try again until I get the right answer. | N.FL.02.10 <br> M.PS.02.10 | Shape shopping for the target <br> Amount |
| 5-11 The Wonderful World of <br> Plants (Optional) | Review and apply key concepts, skills, and <br> strategies learned in this and previous chapters. | N.MR.02.09 <br> N.MR.02.16 | Calling all numbers <br> 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 TwoDigit Numbers |  |  |  |
| 6-1 Subtracting With and Without Regrouping | Regroup 1 ten as 10 ones when subtracting. <br> I can regroup 1 ten as 10 ones when subtracting. | N.MR.02.09 | Race to 100 - OAISD <br> To regroup or not to regroup <br> (Use base 10 blocks and place value mat.) <br> 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. <br> I can subtract a one-digit from a two-digit number with or without regrouping. | $\begin{aligned} & \hline \text { N.MR. } 02.09 \\ & \text { N.FL.02.10 } \end{aligned}$ | Writing the subtraction problem (Use base 10 blocks and place value mat.) <br> 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. <br> I can subtract a one-digit from a two-digit number with or without regrouping. | $\begin{aligned} & \text { N.MR. } 02.09 \\ & \text { N.FL. } 02.10 \end{aligned}$ | Subtracting two-digit numbers (Use base 10 blocks and place value mat.) <br> 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 twodigit number. <br> I can subtract a one-digit from a two-digit number with or without regrouping. | N.FL.02.10 | Showing two ways to solve The next step |
| 6-5 Write a Number Sentence | Solve problems by writing number sentences. <br> I can solve problems by writing number sentences. | 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. <br> I can subtract amounts of money less than $\$ 1.00$ with and without regrouping. | $\begin{aligned} & \text { N.FL.02.10 } \\ & \text { M.PS.02.10 } \end{aligned}$ | Making sense Transactions with money |
| 6-7 Using Addition to Check Subtraction | Relate addition to subtraction by using one operation to check the other. <br> I can check my subtraction by adding. | $\begin{aligned} & \text { N.MR.02.08 } \\ & \text { N.FL.02.10 } \end{aligned}$ | Check-up Check yourself |
| 6-10 Extra Information | Solve two-digit addition and subtracting problems after identifying and eliminating extra information. <br> I can choose important information in a problem. <br> I can solve problems with addition and subtraction. | 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. | $\begin{aligned} & \hline \text { N.MR. } 02.09 \\ & \text { N.MR. } 02.16 \end{aligned}$ | 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. <br> I can identify solid figures (3-d figures) and count their flat surfaces, vertices, and edges. | 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. <br> I can match a geometric solid(3-d shape) to an outline of its flat surfaces and match that flat surface to a plane shape (2-d shape). | G.GS. 02.02 |  |
| Section Assessment | Section A Diagnostic Checkpoint p. 253 |  |  |
| 7-5 Congruence | Identify and create congruent figures <br> I can find and make congruent shapes. |  | 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. <br> I can perform a slide, flip, or turn of an object. | 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 <br> 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. I can problem-solve. | $\begin{aligned} & \hline \text { G.GS. } 02.01 \\ & \text { G.SR. } 02.05 \end{aligned}$ | Note: Use 2 and 3-dimensional objects with the following activities. <br> 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. <br> I can decide if a shape has been divided into equal or unequal parts. <br> I can identify halves, thirds and fourths. | $\begin{aligned} & \hline \text { N.ME.02.21 } \\ & \text { N.ME.02.22 } \end{aligned}$ | Folding equal parts Introduce equal, halves, thirds, fourths and unequal as verbal/visual cards (Still need unequal) <br> Note: Need to use equal size areas and discuss how the unit fraction becomes smaller as the denominator gets larger. (N.ME.02.21) <br> 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. | $\begin{aligned} & \text { N.ME.02.18 } \\ & \text { N.ME.02.19 } \end{aligned}$ | 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. I can identify a fraction | 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 can tell time to five-minutes. | 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 <br> 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. <br> Many ways to tell time <br> Setting times past the hour |
| :---: | :---: | :---: | :---: |
| 8-3 Telling Time Before the Hour | Tell time before the hour. I can tell how many minutes it is before the next hour. | M.UN.02.05 | What is the time before the hour? Time clues Which does not belong? |
| 8-4 Estimating Time | Estimate whether an activity takes minutes, hours, or days to complete. <br> I can estimate if an activity takes minutes, hours, or days. | 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. <br> -l can tell the amount of time that passes between the start of an event and the end of an event. <br> -I can find the ending time when given the elapsed time. | M.UN.02.05 M.UN.02.06 | How much time has passed? <br> Time riddles <br> Before and after |
| 8-6 A.M. and P.M. | Determine whether events occur in the A.M. or P.M. hours. <br> I can tell if events happen in the A.M. or P.M. | 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 <br> I can solve a problem by making a table. |  |  |
| 8-12 Pictographs | Create and analyze data using a pictograph. <br> -I can make a pictograph. <br> -I can read a pictograph using the (key, scale, symbol.) | $\begin{aligned} & \hline \text { D.RE. } 02.01 \\ & \text { D.RE. } 02.02 \\ & \text { D.RE. } 02.03 \end{aligned}$ | Make a pictograph (Instead of tracing their hands, children could stick post-it notes on the chart to speed up the process.) <br> Introduce pictograph as a verbal/visual cards <br> Translating data to pictures |


| 8-12 Pictographs | Create and analyze data using a pictograph. | D.RE.02.01 <br> D.RE.02.02 <br> D.RE.02.03 | Make a pictograph (Instead of <br> tracing their hands, children could <br> stick post-it notes on the chart to <br> speed up the process.) <br> Introduce pictograph as a <br> verbal/visual cards |
| :--- | :--- | :--- | :--- |
| Translating data to pictures |  |  |  |
| Note:Based on D.RE.02.03, half <br> pictures like in "Odd numbers on <br> a pictograph aren't intended for all <br> children. <br> symbol.) |  |  |  |
| 8-15 Coordinate Graphs pictograph using the (key, scale, |  |  |  |


| Chapter 9 Measurement and Probability |  |  |  |
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| 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. <br> I can find the perimeter of a shape. <br> I can find the area of a shape. | 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 <br> 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. <br> I can read the temperature on a thermometer. | M.UN. 02.09 | Hot or cold? <br> Introduce temperature, degrees <br> Fahrenheit and degrees Celsius as verbal/visual cards <br> Celsius or Fahrenheit? <br> Equivalent temperatures |


| Section Assessment | Section B Diagnostic Checkpoint p. 371 |  |  |
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| Section C Probability |  |  |  |
| 9-16 Multiple-Step Problems | Solve multiple-step problems involving addition and subtraction. <br> I can solve problems with addition and subtraction that have more than one step. | 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 . <br> I can count by hundreds to 1,000. | $\begin{aligned} & \hline \text { N.ME.02.01 } \\ & \text { N.ME.02.02 } \end{aligned}$ | $1,000 \mathrm{Xs}$ <br> Matching numbers to 1,999 |
| 10-2 Counting Hundreds, Tens, and Ones | Count sets grouped in hundreds, tens, and ones. I can count sets grouped in hundreds, tens, and ones. | $\begin{aligned} & \hline \text { N.ME. } 02.01 \\ & \text { N.ME. } 02.02 \\ & \text { N.ME. } 02.05 \end{aligned}$ | Mixed-up places <br> Introduce digit as a verbal/visual cards <br> 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. <br> I can read and write three-digit numbers using expanded form, standard form, and number words. | $\begin{aligned} & \text { N.ME. } 02.02 \\ & \text { N.ME.02.05 } \end{aligned}$ | Different representations Introduce number word (or word form), expanded form and standard form as verbal/visual cards <br> 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. <br> I can add and subtract multiples of 10 or 100 from a three-digit number without regrouping. | $\begin{aligned} & \text { N.ME.02.02 } \\ & \text { N.ME.02.05 } \\ & \text { N.FL.02.12 } \end{aligned}$ | Tens and hundreds, more or less? More than and less than |


| 10-5 Comparing Numbers | Compare three-digit numbers using the symbols <, $>$, and $=$. <br> I can compare three-digit numbers using the symbols <,>, and =. | 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. <br> I can use counting on to find the missing number to 1.000 . <br> I can estimate the sum of two numbers with threedigits. | $\begin{aligned} & \text { N.ME.02.01 } \\ & \text { N.FL.02.11 } \\ & \text { N.MR.02.08 } \end{aligned}$ | 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 <br> I can identify numbers, that are before, after, or between given numbers. | 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. <br> I can order three-digit numbers from greatest to least and least to greatest, and use the <, > symbols. | N.ME.02.03 | Order, order! <br> Introduce order as a verbal/visual cards <br> 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 <br> I can continue number patterns using three-digit numbers and skip count by different amounts. | $\begin{aligned} & \hline \text { N.ME.02.01 } \\ & \text { N.ME.02.03 } \end{aligned}$ | 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. | $\begin{aligned} & \text { N.ME. } 02.03 \\ & \text { N.ME. } 02.05 \\ & \text { N.FL.02.12 } \\ & \text { M.UN.02.05 } \end{aligned}$ | Changing words into numbers Ordering solutions |
| Section Assessment | Section B Diagnostic Checkpoint p. 417 |  |  |


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| Chapter Test |  |  |  |


| Chapter 11 Addition and Subtraction of Three-Digit Numbers |  |  |  |
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| 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. <br> 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. <br> I can use paper and pencil to add 2 three-digit numbers. |  |  |
| 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. <br> I can find a missing part of a math problem. | $\begin{aligned} & \text { N.ME. } 02.01 \\ & \text { N.MR.02.08 } \\ & \text { N.FL.02.12 } \end{aligned}$ | Find the missing part Count on to find missing parts (Note: For $170+\ldots=240$, 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 $=70$ ) <br> 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 Animals (Optional) | Review and apply key concepts, skills, and strategies learned in this and previous chapters. | $\begin{aligned} & \text { N.FL. } 02.10 \\ & \text { N.FL. } 02.11 \\ & \text { N.FL. } 02.12 \\ & \text { M.UN.02.06 } \end{aligned}$ | Animal story problems |
| Section Assessment | Section B Diagnostic Ckeckpoint p. 457 |  |  |
| Section Assessment | Section B Diagnostic Ckeckpoint p. 457 |  |  |
| Chapter Assessment | Chapter Test p. 463-464 |  |  |
| Chapter 12 Understanding Multiplication and Division |  |  |  |
| Section A Understanding Multiplication |  |  |  |
| Lesson | Objective | GLCE | Comments |
| 12-1 Skip Counting Equal Groups | Make equal groups of objects and then find the total number of objects in those groups. <br> I can make equal groups of objects and then find the total number of objects in those groups. | $\begin{aligned} & \text { N.MR.02.13 } \\ & \text { N.MR.02.14 } \\ & \text { N.MR.02.16. } \end{aligned}$ | Skip counting groups Introduce equal groups as a verbal/visual card |
| 12-2 Repeated Addition and Multiplication | Write equivalent repeated-addition and multiplication number sentences. <br> I can write repeated-addition and multiplication sentences. | $\begin{aligned} & \hline \text { N.MR.02.13 } \\ & \text { N.MR.02.16 } \end{aligned}$ | Linking addition and multiplication Introduce multiply, product and multiplication sentence as verbal/visual card <br> Reading multiplication and addition Sentences |
| 12-3 Building Arrays | Build an array to model a multiplication situation. I can build an array to show a multiplication situation. | $\begin{aligned} & \text { N.MR.02.13 } \\ & \text { N.MR.02.14 } \\ & \text { N.MR.02.16 } \end{aligned}$ | Equal rows <br> Introduce array and factors as verbal/visual cards <br> Array riddles Finding all the arrays |
| 12-4 Multiplying in Any Order | Multiply numbers in any order to get the same product. <br> I can multiply numbers in any order to get the same product. | N.MR.02.13 <br> N. MR.02.14 <br> N.MR.02.16 <br> N.FL.02.17 | Turning arrays Using the order property The last rectangle - OAISD |


| 12-5 Vertical Form | Multiply numbers written in vertical format. | N.MR.02.13. <br> N.MR.02.16 <br> N.FL.02.17 | Vertical multiplication <br> Two forms of multiplication |
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| 12-6 Draw a Picture | Solve a problem by drawing a picture. <br> I can solve a problem by drawing a picture, using <br> words, objects, or symbols. | N.MR.02.13 <br> N.MR.02.16 <br> N.FL.02.17 | Drawing multiplication <br> Picture solutions <br> Matching pictures and problems |
| Section Assessment | Section A Diagnostic Checkpoint p. 481 |  |  |
| Section B - Understanding <br> Division | Divide a set of objects into a given number of equal <br> groups. | N.MR.02.15 <br> N.MR.02.16 | Sharing pennies <br> Pasta shares |
| 12-7 Making Equal Grou ps | I can divide a set of objects into a given number of <br> equal groups. |  |  |
| I can show that division "undoes" multiplication. |  |  |  |

