	NJDOE MODEL CURRICULUM			
CONTENT AREA: Mathematics		**GRADE: 2**	**UNIT: # 3**	**UNIT NAME: Compare Lengths-Measures in Standard Units-Foundations of Multiplication**

	STUDENT LEARNING OBJECTIVES		CORRESPONDING CCSS	
1	Write an addition equation with repeated equal addends from a rectangular array with up to 5 rows and 5 columns and solve to find the total number.	2.OA.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	
2	Estimate or measure lengths of objects using appropriate tools (inches, centimeters, feet, and meters).	2.MD.1 2.MD.3	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. Estimate lengths using units of inches, feet, centimeters, and meters.	
3	Compare measurements of an object taken with two different units of measure and explain that the difference is related to the size of unit chosen.	2.MD.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	
4	Compare lengths of two objects and determine how much longer one object is than another using the same standard of measure.	2.MD.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	
5	Orally count within 1000 including skip-counting by 5s, 10s, and 100s.	**2.NBT.2**	Count within 1000; skip-count by 5s, 10s, and 100s.	
6	Add fluently within 20 using mental strategies, such as decomposing and composing numbers using the ten and hundred as a benchmark number.	**2.OA.2**	Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.	
7	Choose a strategy (place value, properties of operation, and/or the relationship between addition and subtraction) to add and subtract within 100.	**2.NBT.5**	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	

Selected Opportunities for Connection to Mathematical Practices

1. **Make sense of problems and persevere in solving them.**
   SLO #1 Analyze the information given and relationships in addition and subtraction word problems.
   SLO #4 Analyze the initial number or sequence given to skip count by 5s.
   SLO #7 Analyze the information given to understand the relationships between two 3-digit numbers.
2. **Reason abstractly and quantitatively.**
3. SLO #1 Understand and make sense of the quantities in word problems.
   SLO #4 Understand and make sense of the relationship among the numerical values when skip counting by 5s.
   SLO #7 Make sense of the quantities and their relationship to each other when comparing two 3-digit numbers.
4. **Construct viable arguments and critique the reasoning of others.**
   SLO #7 Create an argument using <,>, or = symbols when comparing two 3-digit numbers.
5. **Model with mathematics.**
   SLO #1 Apply previously learned mathematical skills to solve 1 and 2-step addition and subtraction word problems.
   SLO #4 Apply previously learned skip counting skills to skip count by 5 up to 100.
6. Use appropriate tools strategically.
7. **Attend to precision.**
   SLO #7 Understand the meaning of the <,>, or = symbols when comparing two 3-digit numbers. Use the aforementioned symbols appropriately and consistently.
8. **Look for and make use of structure**.
   SLO #2 Understand the pattern of decomposing numbers when representing 3-digits numbers
   SLO #3 Understand the structure when identifying and representing bundles of ten tens.
   SLO #7 Understand the pattern regarding place value and decomposition when comparing two 3-digit numbers.
8. Look for and express regularity in repeated reasoning.

Bold type identifies possible starting points for connections to the SLOs in this unit.

Greater Brunswick Charter School Curriculum

| Grade level: | 2 | | | Subject: | Math | | Unit #: | 3 |

Day	Topic	SLO	Learning Objectives	Essential Questions	Suggested Student Activities		Possible Resources (in addition to MyMath)
					Whole Group	**Small Group / Stations**	
1	Make a Hundred to Add	6,7	Make a hundred to add a three-digit number	*How can taking apart a number help you add a three-digit number?* *Why might it be easier to make a hundred before adding greater numbers?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.351-356 SnappyMath Sheet
2	Add Hundreds	6,7	Add numbers in the hundreds	*How can knowing addition facts help you solve three-digit addition problems?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.357-362 Online Game – Critter Junction or Fact Dash
3	Mentally Add 10 or 100	7	Add 10 or 100 mentally	*What strategies can you use to add 10 or 100 mentally?* *Why is it easy to mentally add 10 or 100?*	*Exit Ticket* Assign each student a number and have them write 100 more and 10 more.	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.363-368
4	Checking Progress		Review Lessons 2-3		Check My Progress	• Lesson • Ind. Practice • i-Ready	MyMath p.369-370 Assessment Masters p. 190
5	Regroup Ones to Add	7	Regroup the ones to add three-digit numbers	*Why do you have to regroup ones to make a ten when adding three-digit numbers?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.371-376 Journal Writing Activity TE p.373 Addition Three-Digit Numbers

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Day	Topic	SLO	Learning Objectives	Essential Questions	Suggested Student Activities		Possible Resources (in addition to MyMath)
					Whole Group	Small Group / Stations	
6	Regroup Tens to Add	5,6,7	Regroup tens to add three-digit numbers	*How can you show different ways to represent a number to 1,000?*	***Suggestion Intro Activity:*** Read a trade book such as: *Animal Giants* by Sara Louise Kras, to prepare students for the lesson	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.377-382 Reteach Master p.55 Fact Dash Game
7	Add Three-Digit Numbers	1,7	Add three-digit numbers with regrouping	*How is adding a three-digit number different than adding a two-digit number?*	*Make sure to review place value and starting addition in the ones column; as some students may try and start in the hundreds*	• Lesson • Guided Practice • Ind. Practice • i-Ready • **(Suggested) Formative Assessment**: Have students reflect on what they have learned by answering the following problem on their index card: 795+116=___ Once all students are finished ask volunteers to explain how many times they had to regroup and why?	MyMath p. 383-388 Three-Digit Addition In and Out Boxes
8	Rewrite Three-Digit Addition	6	Rewrite a horizontal three-digit addition problem vertically before adding	*Explain how to regroup hundreds to add three-digit numbers.*	**Model the Math** *Whole Group: TE389B Discuss the difficulties of adding without rewriting the problem vertically*	• Lesson • Guided Practice • Ind. Practice • i-Ready • **(Suggested) Formative Assessment:** Think-Pair-Share: Students find the sum of 445+345. Have students discuss their answer with a friend before sharing with the whole class. Also, discuss if they had to regroup and how many times.	MyMath p. 389-394 Vertical Three-Digit Addition (You can customize the activity sheet)

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9	Problem Solving: Guess, Check, and Revise	7	Use the guess, check, and revise strategy to solve problems	*Why is it important for you to have a plan for solving a word problem?*	**Suggestion:** Review & Model underlining the information they know and circling the information they need to find	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 395-400 Lesson Animation: PSS:Guess, Check, and Revise Three-Digit Addition Word Problems Online Reteach Worksheet
10	Chapter Review		Addition of Three-Digit Numbers				MyMath p.401-404
11	Assessment		Addition of Three-Digit Numbers			•	MyMath Summative Assessment
12	Take Apart Hundreds to Subtract	6,7	Make a hundred to subtract a three-digit Number	*How can making a hundred help you with subtracting three-digit numbers?*	*Exit Ticket:* (Formative Assessment) **Journal Writing**: TE 415	• Lesson • Guided Practice • Ind. Practice • i-Ready *Focus on students explaining the steps to solve the problem*	MyMath p.413-418 Interactive Subtraction Game (This online game starts off with simple addition and increases in difficulty as the student answers correctly) Reteach Master p.60
13	Subtract Hundreds	7	Subtract numbers in the hundreds	*What are some objects you can use to model subtracting numbers in the hundreds?*	*Exit Ticket:* Line Up Activity: TE 421	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 419-424 Subtract Hundreds
14	Mentally Subtract 10 or 100	6,7	Mentally subtract numbers by 10 or 100	*How can you mentally subtract 10 or 100 mentally?*	*Exit Ticket:* Line-Up Activity: TE 429	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 425-430
15	Checking Progress		Subtract Three-Digit Numbers			• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.431-432 Adapted Mind Website – Students can practice and review previous skills

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16	Regroup Tens	5,7	Regroup tens to subtract three-digit numbers	*How is subtracting three-digit numbers like subtracting two-digit numbers?*	**(Suggested):** **Formative Assessment** Journal Writing: Have students respond in writing and then discuss: *Why do you sometimes have to regroup tens in order to subtract?*	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 433-438 MyMath Lesson Animation: Regroup Tens
17	Regroup Hundreds	5,7	Regroup hundreds to subtract three-digit numbers	*How do you know when to regroup? Do you always, sometimes, never need to regroup in the hundreds place?*	*Suggestion:* *Exit Ticket:* Have students explain how to regroup hundreds.	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 439-444 Three-Digit Subtraction Three-Digit Subtraction Activity Sheet
18** Two Lessons	Review and Practice Subtract Three-Digit Numbers & Problem Solving	5,7	Subtract three-digit numbers Write a number sentence strategy to solve problems	*What strategy can you use to subtract three-digit numbers?* *What strategies can you use to solve three-digit subtraction word problems?*		• Lesson • Guided Practice – Have students work on MyMath p.447 independently as you work on p.448, 457, Word Problems • Ind. Practice – Students will work on p.459 independently • i-Ready	MyMath p.445-450 & 457-462 MyMath Web Game – Fact Dash Reteach Sheet
19	Rewrite Three-Digit Subtraction	5,7	Rewrite horizontal three-digit subtraction as vertical three-digit subtraction	*How can you write a three-digit subtraction problem two different ways?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 451-456 Horizontal Three-Digit Subtraction Sheet – Utilize this sheet by breaking it up and giving students four or five problems at a time.
20	Subtract Across Zeros	5,7	Subtract from numbers ending in zero	*How is subtracting from 400 different than subtracting from 435?*	*Exit Ticket*: Journal Writing Activity TE p. 465	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.463-468 Math Generator – Great site to create your own practice sheets

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					Whole Group	**Small Group / Stations**	
21	Review					• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 469-472 MyMath Reteach Sheets MyMath Web Game: Fact Dash
22	Assessment		Three-Digit Subtraction			• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath Summative Assessment
23	Inches	2,3	Use an inch ruler to measure objects	*How can you use an inch ruler to measure objects?*	**Suggested:** ***Read the trade book, "Inch by Inch" by: Leo Lionni to prepare students for the lesson***	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.645-650 Reteach Master p.92 Inches Activity Sheet – This sheet can be utilized in an independent center activity or used as homework
24	Feet and Yards	2,3	Measure objects in feet and yards	*Describe how to estimate the length of an object.*	**Suggested:** ***Reason Quantitatively TE p.651A***	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 651-656 Lesson Animation – Foot an Yards Inch, Feet, Yard YouTube Video
25	Select and Use Customary Tools & Check My Progress	2	Choose the appropriate customary tool and measure objects by length	*What tools can you use to measure length?* *How do you know which tool to use measure?*	**Exit Ticket:** **Give students an index card face down, when you call on them, they turn over the card and read the object on the card (crayon box, chalk, pencil, football field, etc…) and tell you whether they would need to use a ruler, yardstick, or measuring tape to measure the object.**	• Lesson • Guided Practice – Work on Checking Progress p.663-664 • Ind. Practice • i-Ready	MyMath p. 657-664 Reteach Masters Customary Unit of Measure Interactive Activity

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					Whole Group	Small Group / Stations	
26	Compare Customary Lengths	3,4	Measure to compare customary lengths	*How can you compare the lengths of two objects?*	**Suggestion:** **Read trade book "How Tall, How Short, How Far Away" by: David Adler, to prepare for the lesson** *Review writing number sentences with addition and subtraction*	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 665-670 Reteach Masters
27	Relate Inches, Feet, and Yards	3,4	Use measurement to relate inches, feet, and yards	*What is the relationship between inches, feet, and yards?*	**Formative Assessment:** TE p.673	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 671-676 Lesson Animation – Measure Length
28	Problem Solving: Using Logical Reasoning & Checking Progress	2,3	Use the logical reasoning strategy to solve problems	*How can using logical reasoning help you analyze and think through a problem?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p.677-684 Measurement Word Problems
29	Centimeters and Meters	3,4	Use a centimeter ruler and a meterstick to measure objects	*When is it appropriate to measure in centimeters and meters?*	**Formative Assessment:** **Exit Ticket:** Before each student lines up, call out an object and have the student tell whether it is better to measure it in centimeters or meters, and explain why.	• Lesson • Guided Practice – *Before leaving small group have students explain what they know about measuring in centimeters.* • Ind. Practice • i-Ready	MyMath p. 685-690 Centimeters and Meters Activity Sheet
30	Select and Use Metric Tools	3,4	Choose the appropriate metric tool and measure objects by length	*Explain how an object measured in centimeters is different from an object measured in meters.*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 691-696

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					Whole Group	Small Group / Stations	
31	Compare Metric Lengths	3,4	Use measurement to compare metric length	*How can you use measurement to compare metric length?* *When you are comparing lengths, why is it important to use the same unit of measure for both objects?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 697-702
32	Relate Centimeters and Meters	2,3	Use measurement to relate centimeters and meters	*How can you use measurements to relate centimeters and meters?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 703-708 Selecting Centimeter or Meter Interactive Activity
33	Measure on a Number Line	2,3	Use a number line to measure objects	*How can a number line help you measure an object?*	Review: Counting on a number line and writing number sentences	• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 709-714 Reteach Master p. 103
34	Measurement Data	2,3	Measure lengths to generate data shown on a line plot	*How can you use measurements to generate data?*		• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 715-720 Reteach Master p. 104
35	Review		Measurement – Length			• Lesson • Guided Practice • Ind. Practice • i-Ready	MyMath p. 721-724
36	Assessment		Measurement – Length				MyMath Summative Assessment

Word Wall Candidates

add	hundreds	zero	regroup	ones
tens	difference	subtract	estimate	inch
length	measure	yard	foot	longer
shorter	centimeter	meter	numberline	data

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					Whole Group	Small Group / Stations	

Authentic Application

Your Goal: Write a Measurement Story.

Your Role: Create and design measurement stories utilizing three-digit addition and subtraction and comparing measurements.

Your Audience: Your classmates

The Situation:

- First think of three or more characters for your story – *What are their names? How long or tall are they (Three digit numbers)? Which is tallest? Which is shortest?*
- Draw your characters. *Label their heights in a length of your choosing…remember they have to be three digit numbers*
- Write your measurement story.

The Final Product: You must draw, label, and create:

- Use chart paper to draw your characters and label their (actual) measurements (Characters should be different heights or lengths)
- Next, create your measurement story
- Create number sentences utilizing a three-digit addition problem and a three-digit subtraction problem to compare lengths
- Solve, illustrate, and explain your work

Success Criteria: To be successful, you must provide, at the end of the project:

- One or more Measurement Story, Illustration, Number Sentences, and detailed explanation of your work.