Marietta City Schools
District Unit Planner

1st Grade

Unit Name	Unit 5: Problem Solving to Answer Real Life Questions	Unit duration (Days)	6-7 weeks

[GA K-12 Standards](#)

As a result of students' engagement with this unit, students will develop and use strategies to solve contextual problems (real-life) within 100. Students will develop mental math strategies as they use and connect place value understanding, single digit addition/subtraction strategies, and concrete tools to add and subtract within 100. Students will find ten more or less than a number, count by tens to add and subtract multiples of 10 within 100, and use mental math strategies as well as concrete models and to solve and justify solutions to real-life problems.

1.NR.1: Extend the count sequence to 120. Read, write, and represent numerical values to 120 and compare numerical values to 100.
- **1.NR.1.1** Count within 120, forward and backward, starting at any number. In this range, read and write numerals and represent a number of objects with a written numeral.
- **1.NR.1.2** Explain that the two digits of a 2-digit number represent the amounts of tens and ones.
- **1.NR.1.3** Compare and order whole numbers up to 100 using concrete models, drawings, and the symbols >, =, and <.

1.NR.2: Explain the relationship between addition and subtraction and apply the properties of operations to solve real-life addition and subtraction problems within 20.
- **1.NR.2.1** Use a variety of strategies to solve addition and subtraction problems within 20.
- **1.NR.2.2** Use pictures, drawings, and equations to develop strategies for addition and subtraction within 20 by exploring strings of related problems.
- **1.NR.2.3** Recognize the inverse relationship between subtraction and addition within 20 and use this inverse relationship to solve authentic problems
- **1.NR.2.4** Fluently add and subtract within 10 using a variety of strategies.
- **1.NR.2.5** Use the meaning of the equal sign to determine whether equations involving addition and subtraction are true or false
- **1.NR.2.6** Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.
- **1.NR.2.7** Apply properties of operations as strategies to solve addition and subtraction problem situations within 20.

1.NR.5: Use concrete models, the base ten structure, and properties of operations to add and subtract within 100.
- **1.NR.5.1** Use a variety of strategies to solve applicable, mathematical addition and subtraction problems with one- and two-digit whole numbers.
- **1.NR.5.2** Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- **1.NR.5.3** Add and subtract multiples of 10 within 100.

1.MDR.6: Use appropriate tools to measure, order, and compare intervals of length and time, as well as denominations of money to solve real-life, mathematical problems and analyze

graphical displays of data to answer relevant questions.
- **1.MDR.6.1** Estimate, measure, and record lengths of objects using non-standard units, and compare and order up to three objects using the recorded measurements. Describe the objects compared.
- **1.MDR.6.2** Tell and write time in hours and half-hours using analog and digital clocks, and measure elapsed time to the hour on the hour using a predetermined number line.
- **1.MDR.6.3** Identify the value of quarters and compare the values of pennies, nickels, dimes, and quarters.
- **1.MDR.6.4** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to compare and order whole numbers.

1.MP.1-8 Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration and expression. Seek help and apply feedback. Set and monitor goals.
- **1.MP.1** Make sense of problems and persevere in solving them.
- **1.MP.2** Reason abstractly and quantitatively.
- **1.MP.3** Construct viable arguments and critique the reasoning of others.
- **1.MP.4** Model with mathematics.
- **1.MP.5** Use appropriate tools strategically.
- **1.MP.6** Attend to precision.
- **1.MP.7** Look for and make use of structure.
- **1.MP.8** Look for and express regularity in repeated reasoning.

The [Framework for Statistical Reasoning](#) and the [Mathematical Modeling Framework](#) should be taught throughout the units. The [K-12 Mathematical Practices](#) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.

Essential Questions/ I CAN Statements

- I can read, write, and represent numbers to 120.
- I can compose and decompose numbers in various ways based on the place value of the digits.
- I can compare numbers to 120 based on place value.
- I can solve addition and subtraction problems with two addends.
- I can organize data using charts and graphs.
- I can ask and answer questions about data.
- I can identify missing addends within 20.
- I can solve addition and subtraction problems within 20.
- I can use my understanding of the equal sign to determine whether equations are true or false.
- I can solve addition and subtraction problems with up to three addends.

Tier II Vocabulary Words- High Frequency Multiple Meaning	**Tier III Vocabulary Words-** Subject/ Content Related Words

Counting on, numeral, greater than, less than, equal to, place value, comparison, interpret, fluency, inequality, estimate, compare, measure, length, time, number line, value	Data, table, tally mark, number line, compose, decompose, hours, half-hours, analog clock, digital clock, elapsed time, quarters, nickels, pennies, dimes K-12 Mathematics Glossary

Assessments	
Formative Assessment(s): ● MCS K-5 Activity & Assessment Collection ● MCS Mini ● MCS Mini ● MCS Mini ● MCS Mini	**Summative Assessments**

It is the responsibility of each schools' grade level PLC to identify appropriate instructional lessons and resources, based on data and student needs, using the suggested pacing duration. The following learning tasks have been vetted to align to the standards included in this unit. The GA Dept. of Education strongly recommends that any additional tasks, resources, and/or assessments used for instruction should be vetted using the Quality Assurance Rubric, to ensure alignment to the state standards.

Objective or Content	Learning Experiences	Differentiation Considerations
1.NR.1 Extend the count sequence to 120. Read, write, and represent numerical values to 120 and compare numerical values to 100.	**Building Numbers** *In this learning plan, students will count, write, compare, order, and build numbers to 120 based on an understanding of place value. (Suggested Timeframe 5-6 days)* - Teacher Guidance - Student Reproducibles - Blackline Masters	Clapping Forward and Backward - Say the forward and backward number word sequence in the range 0-10, 0-20, 0- 100 Outdoor Counting to 100 - Say forwards and backwards number word sequences in the range of 0-100. Number Fans - Say forwards and backwards number word sequences in the range 0-100. Number Line Flips - Order and say the forwards and backwards number word sequences in the range 0-10, 0-20 Make Ten - Further develop part/whole mental methods of making a ten Using Ten Frames for the Strategy of Bridging to a Ten - Mental math strategies of making a ten
1. NR.2 Explain the relationship between addition and	**Candy** **<mark>*Also includes 1.MDR.6</mark>** *In this learning plan, students will collect, organize, and represent data. Students will use their collected data to ask and answer questions, as well as practice addition and subtraction strategies. (Suggested Timeframe 6-7 days)*	Adding and Subtracting Counters - Solve addition problems to 20 by joining sets and counting all the objects

Last Revised: June 2023

subtraction and apply the properties of operations to solve real-life addition and subtraction problems within 20.	● [Teacher Guidance](#) ● [Student Reproducibles](#) **Addition and Subtraction Challenges** *In this learning plan, students will practice identifying missing addends within 20. They will use their knowledge of the relationship between addition and subtraction to solve addition and subtraction problems within 20 and use their understanding of the equal sign to determine whether equations are true or false. (Suggested Timeframe 5-6 days)* ● [Teacher Guidance](#) ● [Student Reproducibles](#)	[Ladybug Friends](#) - Solve addition problems to 20 by joining sets and counting all the objects [Teens and Fingers](#) - Solve subtraction problems from 20 separating sets and counting all the objects
1.NR.5: Use concrete models, the base ten structure, and properties of operations to add and subtract within 100.	**GA DOE Learning Plans** **Adding and Subtracting Within 100** *In this learning plan, students will use their knowledge of the relationship between addition and subtraction to solve addition and subtraction problems within 100. (Suggested Timeframe 4-5 days)* ● [Teacher Guidance](#) ● [Student Reproducibles](#) ● [Blackline Masters](#) **Working with Multiples of 10** *In this learning plan, students will add and subtract multiples of 10, and develop fluency mentally finding 10 more and 10 less than a number. (Suggested Timeframe 5-6 days)* ● [Teacher Guidance](#) ● [Student Reproducible](#) **Comparing Amounts of Coins** ==*Also includes 1.MDR.6*== *In this learning plan, students will apply what they have learned about the value of coins to solve real-life addition and subtraction problems with one and two digit numbers. (Suggested Timeframe 3-4 days)* ● [Teacher Guidance](#) ● [Blackline Masters](#)	**MCS Curriculum Resources** **SAVVAS enVision Topic 10: Use Models and Strategies to Add Tens and Ones** *Students use strategies based on place value and properties of operations to add within 100 and subtract multiples of 10 within 100.* ● Lesson 10-1:Add Tens Using Models ● Lesson 10-2: Ten More Than a Number ● Lesson 10-3: Add Tens and Ones Using a Hundred Chart ● Lesson 10-4: Adding Tens and Ones Using an Open Number Line ● Lesson 10-5: Add Tens and Ones Using Models ● Lesson 10-6: Make a Ten to Add ● Lesson 10-7: Add Using Place Value ● Lesson 10-8: Practice Adding Using Strategies **SAVVAS enVision Topic 11: Use Models and Strategies to Subtract Tens** *Students use strategies based on place value and properties of operations to add within 100 and subtract multiples of 10 within 100.* ● Lesson 11-1:Subtract Tens Using Models ● Lesson 11-2: Subtract Tens Using a Hundred Chart ● Lesson 11-3:Subtract Tens Using an Open Number Line ● Lesson 11-4: Use Addition to Subtract Tens	

		● Lesson 11-5: Mental Math: Ten Less Than a Number ● Lesson 11-6: Use Strategies to Practice Subtraction ● Lesson 11-7: Model with Math ● Lesson 10-8: Practice Adding Using Strategies **MIP Module 5: Building UNderstanding and Fluency with Basic Math Facts +/- 10** *The key ideas focused on in this module include: exploring strategies for adding 10 to a quantity , gaining fluency with +10 facts , exploring strategies for subtracting 10 from a quantity or finding a difference of 10 , gaining fluency with −10 facts.* ● Ten Flashing Fireflies **MIP Module 9: Exploring Addition and with a 2-Digit Number** *The key ideas focused on in this module include: mentally finding 10 more or 10 less than a 2-digit number, using place value models, drawings, or strategies to add a 2-digit number and a 1-digit number and to add a 2-digit number and a multiple of 10, using place value models, drawings, or strategies to subtract a multiple of 10 from a multiple of 10 (e.g., 70 − 30).* ● 10 More on a Hundred Chart ● Adding 10 Using a Number Line ● Adding 10 More with Base 10 Blocks ● Pick and Add 10	
1.MDR.6: Use appropriate tools to measure, order, and compare intervals of length and time, as well as denominations of money to solve real-life, mathematical problems and analyze graphical displays of data to answer relevant questions.	**Hopping Around the Clock** *In this learning plan, students will use a predetermined number line to measure elapsed time to the hour on the hour. (Suggested Timeframe 3-4 days)* ● Teacher Guidance ● Student Reproducibles **Measurement Comparisons** *In this learning plan, students will compare and order up to three objects using the recorded measurements and describe the objects compared. (Suggested Timeframe 5-6 days)* ● Teacher Guidance ● Student Reproducibles	**MIP Module 12: Working with Money** *The key ideas focused on in this module include recognizing coins, knowing the value of each coin , counting sets of like coins (pennies, nickels, dimes).* ● Coin Frames, p. 271-272 ● Counting Pennies and Dimes, p. 274 ● Exploring the Hour Hand, p. 249-251 ● Match the Clocks, p. 263 ● Digital and Analog: Predict and Check, p. 259-261 **SAVVAS Topic 13: Time and Money** *Students are introduced to the hour and*	Playing Favourites - Pose, plan, analyze data

Last Revised: June 2023

		minute hands on a clock. They tell time to the hour and half hour. Students also tell the value of coins and find the value of a group of coins.	
		● Lesson 13-1: Tell the value of coins	
		● Lesson 13-2: Find the value of a group of coins	
		● Lesson 13-3: Understand the hour and minute hands	
		● Lesson 13-4: Tell and write time to the hour	

Content Resources

MCS Links:	Additional Resources:
● MCS Math GR1 Curriculum Map ● MCS Math Instructional Framework **GA DOE Links:** *Access all GADOE Curriculum Resources at the following site: GaDOE Inspire.*	● Suggested Tools: 120 chart, base ten blocks, counters, ten frames, dot cards, unifix cubes, nonstandard measurement tools, counters, graphic organizers, number lines, base ten blocks, 2D shapes, 3D shapes, nonstandard measurement tools, clocks, pennies, nickels, dimes, quarters