

Marietta City Schools District Unit Planner

First Grade

Unit Name

Unit 1: Extending Number Sequence Understanding to Build, Compare and Interpret Numbers within 120

Unit Duration

6-7 weeks

GA K-12 Standards

In this introductory unit, students will expand their number concept developed previously established in kindergarten and begin to develop a deeper understanding of counting and place value. They will read, write, and concretely represent numbers as they count numbers forward and backward starting with any number within 120. In tandem with developing an understanding of counting and place value, students will investigate real-life situations via inquiry. They will ask questions for investigation and answer them based on gathered information, observations, and appropriate graphical displays to compare and order the whole numbers.

- 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. *Students will only add and subtract up to 10 in this unit.
 - 1.NR.2.1 Use a variety of strategies to solve addition and subtraction problems within 20.
 - 1.NR.2.5 Use the meaning of the equal sign to determine whether equations involving addition and subtraction are true or false
- 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 answer relevant questions
 - **1.MDR.6.1** Estimate, measure, and record lengths and objects using non-standard units, and compare and order up to three objects using the recorded measurements. Describe the objects compared.
 - 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 <u>Framework for Statistical Reasoning</u> and the <u>Mathematical Modeling Framework</u> should be taught throughout the units. The <u>K-12 Mathematical Practices</u> 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

NR.1, NR.2

- I can compose and decompose numbers in many ways.
- I can find number partners to ten.
- I can compare objects of different lengths.
- I can identify teen numbers.
- I can tell that teen numbers are made up of ten and some ones.
- I can identify the tens and ones in a teen number.
- I can read, write, and represent numbers to 40.
- I can compose and decompose numbers in various ways based on the place value of the digits.
- 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

MDR.6

- I can use a chart to collect and organize data.
- I can collect data.
- I can interpret data collected.
- I can represent data in a variety of ways.
- I can determine when a data display is useful.

Tier II Vocabulary Words- High Frequency Multiple Meaning	Tier III Vocabulary Words- Subject/ Content Related Words
Counting on, numeral, equation, addends, greater than (>), more than, less than (<), equal to (=), place value, comparison, interpret, fluency, inequality, sum, estimate	Data, table, tally mark, ten frame, number line, compose, decompose, pictograph, bar graph K-12 Mathematics Glossary

Assessments			
Formative Assessment(s):	Summative Assessment:		
MCS K-5 Activity & Assessment Collection			
NR.1.1 Quick Check			
NR.1.2, 1.3 Quick Check			
NR.2.1 Quick Check			
NR.2.5 Quick Check			
MIP Module 8 Formative 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.	Investigating Numbers: Making Tens *Also includes 1.NR.2 In this learning plan, students will solidify their understanding of making ten. (Suggested timeframe 3-4 days) • Teacher Guidance • Student Reproducibles	MCS Curriculum Resources SAVVAS Topic 7: Extend the Counting Sequence Students extend their understanding of the counting sequence to numbers through 120. Lesson 7-1: Count by 10s to 120 Lesson 7-2: Count by 1s to 120 Lesson 7-3: Count on a Number Chart to 120	Bead Strings: Count up to 50 objects by grouping the objects in tens. Clapping Forward and Backward: Say the forward and backward number word sequence
	Building Teen Numbers *Also includes 1.NR.2 This learning plan is designed to solidify this understanding in preparation for working with greater numbers. (Suggested timeframe 3-4 days) • Teacher Guidance • Student Reproducibles Working with Numbers Up to 40 This learning plan builds on the understanding of teen numbers to read, write, and represent numbers to 40. (Suggested timeframe	SAVVAS Topic 8: Understanding Place Value Students learn that two digit numbers represent amounts of tens and ones. They use their understanding of place value to compare numbers. • Lesson 8-1: Make Numbers 11-19 • Lesson 8-2: Numbers Made with Ten • Lesson 8-3: Count with Groups of Tens and Ones • Lesson 8-4: Tens and Ones • Lesson 8-5: Continue with Tens and Ones • Lesson 8-6: Different Names for the Same Number	in the range 0-10, 0-20, 0-100 Outdoor Counting to 100: Forward and Backward Say forwards and backwards number word sequences in the range of 0-100 Counting As We Go:

3-4 days)

- Teacher Guidance
- Student Reproducibles

Counting, Reading, Writing, and Representing Numbers to 120

In this learning plan, students will compose and decompose numbers in various ways based on the place value of the digits. (Suggested timeframe 3-4 days)

- Teacher Guidance
- Student Reproducibles

Number Games

*Also includes 1.MDR.6

In this learning plan, students will compose and decompose numbers in various ways based on the place value of the digits. (Suggested timeframe 4-5 days)

- <u>Teacher Guidance</u>
- Student Reproducibles

Savvas Topic 9: Compare Two-Digit Numbers

Students learn that two digit numbers represent amounts of tens and ones. They use their understanding of place value to compare numbers.

- Lesson 9-3: Compare Numbers
- Lesson 9-4: Compare Numbers with Symbols
- Lesson 9-5: Compare Numbers on a Number Line
- 3-ACT Task: Digit Flip

MIP Module 8: Counting and Understanding Place Value

The key ideas focused on in this module include counting to 120, starting at any number, and reading and writing numerals, understanding the meaning of tens and ones in a 2-digit number, decomposing 2-digit numbers, comparing 2-digit numbers using symbols.

- Counting Around, p. 166
- Building a Pocket Hundred Chart, p. 167
- Investigating Patterns on the Hundred Chart, p. 168
- Building a 120 Chart, p. 170
- Missing Numbers, p. 170
- Make Decades Pop, p. 171
- Hundred Chart Puzzles, p. 173
- Build a Number, p. 179
- Place, Value, and Digits, p. 180
- Make It True, p. 184
- Build, Predict, and Compare, p. 189
- Numbers Between, p. 190
- Symbols for Comparing Numbers, p. 191
- Ten Frame Compare, p. 192
- Spin and Compare, p. 194
- Place Value Target, p. 195

Form a set of objects and identify all the numbers in the range 0-10.

Number Mat: Identify all of the numbers in the range 0-100.

<u>Lily Pads</u>:Identify all of the numbers in the range 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

1.NR.2

Explain the relationship between addition and subtraction and apply the properties of operations to

Investigating Numbers: Making Tens

*Also includes 1.NR.1

In this learning plan, students will solidify their understanding of making ten. (Suggested timeframe 3-4 days)

- <u>Teacher Guidance</u>
- Student Reproducibles

SAVVAS Topic 1: Understand Addition and Subtraction

Students represent and solve problems involving addition and subtraction within 10.

- Lesson 1-1: Add To
- Lesson 1-2: Put Together
- Lesson 1-3: Both Addends Unknown
- Lesson 1-4: Take From

Make Ten - Further develop part/whole mental methods of making a ten

<u>Using Ten Frames for</u> <u>the Strategy of Bridging</u>

solve real-life addition and subtraction problems within 20.	Building Teen Numbers *Also includes 1.NR.1 This learning plan is designed to solidify this understanding in preparation for working with greater numbers. (Suggested timeframe 3-4 days) • Teacher Guidance • Student Reproducibles	 Lesson 1-5: Compare Situations Lesson 1-6: More Compare Situations Lesson 1-7: Change Unknown Lesson 1-8: Practice Adding and Subtracting 	to a Ten - Mental math strategies of making a ten Adding and Subtracting with Counters - Solve addition problems to 20 by joining sets and counting all the objects.
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 answer relevant questions	How Do You Like Those Potatoes *Also includes 1.NR.1 and 1.NR.2 In this learning plan, students will collect data about such topics as their favorite method of preparing potatoes or their favorite pizza toppings. (Suggested timeframe 3-4 days) • Teacher Guidance • Student Reproducibles	SAVVAS Topic 6: Represent and Interpret Data Students organize and interpret data to answer questions. They learn to represent data visually using tally charts and picture graphs. • Lesson 6-1: Organize Data Into Three Categories • Lesson 6-2: Collect and Represent Data • Lesson 6-3: Interpret Data • Lesson 6-4: Continue to Interpret Data MIP Module 13: Representing and Interpreting Data The key ideas focused on in this module include organizing and representing up to three categories of data, describing and interpreting data, and answering questions about data. • Favorite Party Foods, p. 290 • Tally O'Malley, p. 292 • Favorite Colors, p. 294 • Focus on the Question, p. 296 • You Write the Questions, p.299	Playing Favorites - Pose, plan, analyze data

Content Resources

MCS Links:

- MCS Math GR1 Curriculum Map
- MCS Math Instructional Framework

GA DOE Links:

Access all GADOE Curriculum Resources at the following site: GaDOE Inspire.

Additional Resources:

• Suggested Tools: 120 chart, base ten blocks, counters, ten frames, dot cards, unifix cubes, nonstandard measurement tools