

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.
 - 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):

MCS K-5 Activity & Assessment Collection

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	GADOE Learning Plans	MCS Curriculum Resources	Bead Strings: Count up to 50 objects by grouping the objects
sequence to 120.	Investigating Numbers: Making Tens	SAVVAS Topic 7: Extend the Counting Sequence	in tens.
Read, write, and	*Also includes 1.NR.2	Students extend their understanding of the counting sequence	in tens.
represent numerical	In this learning plan, students will solidify their understanding	to numbers through 120.	Clapping Forward and
values to 120 and	of making ten. (Suggested timeframe 3-4 days)	• Lesson 7-1: Count by 10s to 120	Backward: Say the forward and
compare numerical	Teacher Guidance	• Lesson 7-2: Count by 1s to 120	backward number word
values to 100.	Student Reproducibles	Lesson 7-3: Count on a Number Chart to 120	sequence in the range 0-10,
			0-20, 0- 100
	Building Teen Numbers	SAVVAS Topic 8: Understanding Place Value	
	*Also includes 1.NR.2	Students learn that two digit numbers represent amounts of	Outdoor Counting to 100:
	This learning plan is designed to solidify this understanding in	tens and ones. They use their understanding of place value to	Forward and Backward Say
	preparation for working with greater numbers. (Suggested	compare numbers.	forwards and backwards
	timeframe 3-4 days)	• Lesson 8-1: Make Numbers 11-19	number word sequences in the
	 <u>Teacher Guidance</u> Student Reproducibles 	 Lesson 8-2: Numbers Made with Ten 	range of 0-100
	<u>stadent neproductions</u>	MIP Module 8: Counting and Understanding Place Value	Counting As We Go: Form a set
	Working with Numbers Up to 40	The key ideas focused on in this module include counting to	of objects and identify all the
	This learning plan builds on the understanding of teen numbers	120, starting at any number, and reading and writing	numbers in the range 0-10.
	to read, write, and represent numbers to 40. (Suggested	numerals, understanding the meaning of tens and ones in a	
	timeframe 3-4 days)	2-digit number, decomposing 2-digit numbers, comparing	Number Mat: Identify all of the
	<u>Teacher Guidance</u>	2-digit numbers using symbols.	numbers in the range 0-100.
	Student Reproducibles	Investigating Patterns on the Hundreds Chart, p.179	
	<u> </u>	Building a Hundred Chart, p. 181	Lily Pads:Identify all of the
	Counting, Reading, Writing, and Representing Numbers to		numbers in the range 0-100.
	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

How Do You Like Those Potatoes

*Also includes 1.NR.2 and 1.MDR.6

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)

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

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.

GADOE Learning Plans

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)

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

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

MCS Curriculum Resources

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
- Lesson 1-5: Compare Situations
- Lesson 1-6: More Compare Situations
- Lesson 1-7: Change Unknown
- Lesson 1-8: Practice Adding and Subtracting

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

<u>Using Ten Frames for the</u> <u>Strategy of Bridging to a Ten</u> -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.

How Do You Like Those Potatoes *Also includes 1.NR.1 and 1.MDR.6

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)

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

MIP Module 1: Exploring Addition Word Problems with Sums to 20

The key ideas focused on in this module include understanding the story structures that show addition, using strategies like retelling and modeling to comprehend addition word problems, building equations to represent addition word problems, finding the unknown in a variety of addition word problems (solving for unknowns in different places).

- Putting Together, p, 21
- Act It Out-Show It-Draw It, p.23

MIP Module 2: Connecting Subtraction and Addition to Solve Word Problems

The key ideas focused on in this module include, understanding the problem structures that indicate the operation of subtraction, using strategies like retelling and modeling to comprehend subtraction word problems, building equations to represent subtraction word problems, exploring the connections between addition and subtraction situations (inverse), solving for unknowns in different places in subtraction word problems.

• Comparing Towers, p. 46

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

GADOE Learning Plans

Number Games

*Also includes 1.NR.1

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)

- Teacher Guidance
- Student Reproducibles

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

MCS Curriculum Resources

SAVVAS Topic 12: Measure Lengths

Students use indirect measurement to compare two lengths. They measure length using nonstandard units.

• Lesson 12-1: Compare and Order by Length

SAVVAS Topic 13: Time and Money

Students are introduced to the hour and 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

<u>Playing Favorites</u> - Pose, plan, analyze data

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

- 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

GA DOE Links:

- GA DOE Grade 1 Unit 1: Extending Number Sequence Understanding to Build, Compare, and Interpret Numbers within 120
- GA DOE Grade 1 Comprehensive Grade Level Overview
- GA DOE Grade 1 Guide for Effective Mathematics Instruction
- K-5 Georgia Mathematics Strategies Toolkit
- Mathematics to Support English Language Learners
- Georgia Numeracy Project
- K-12 Mathematical Modeling Framework
- K-12 Statistical Reasoning Framework
- K-12 Mathematical Practices

Additional Resources:

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