Unit 2 Reveal Grade 2

Content Area: **Math**
Course(s): **Math**
Time Period: **October**
Length: **2 weeks**
Status: **Published**

Unit Overview

UNIT 2 PLANNER
Place Value to 1,000

PACING: 9 days

LESSON		MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
Unit Opener Different Ways to Balance Explore how to balance a scale using one-pound and ten-pound weights and represent solutions with base-ten blocks.						
2-1	Understand Hundreds	Students explain hundreds with regard to place value – 100 is one hundred or 10 tens, 200 is two hundreds or 20 tens, and so on.	Students explain their understanding of 100 as 10 groups of ten using the term *each*.	Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.	2-1	Math Terms hundreds tens
2-2	Understand 3-Digit Numbers	Students explain what the digits in a 3-digit number represent. Students represent 3-digit numbers.	Students explain that the digits of a 3-digit number represent amounts of hundreds, tens, and ones and represent 3-digit numbers using the term *notice*.	Students recognize personal strengths through thoughtful self-reflection.	2-2	base-ten blocks digit ones place-value chart
2-3	Read and Write Numbers to 1,000	Students read and write numbers to 1,000.	Students discuss and write 3-digit numbers using the term *different ways*.	Students actively listen without interruption as peers describe how they approached a complex mathematical task.	2-3	decompose expanded form standard form word form
2-4	Decompose 3-Digit Numbers	Students decompose 3-digit numbers by grouping the hundreds, tens, and ones in different ways.	Students identify and decompose 3-digit numbers and justify different ways to decompose the same number using the word *group*.	Students break down a situation to identify the problem at hand.	2-4	decompose place value
Math Probe Building Numbers Compose and decompose numbers based on different place-value combinations, with regrouping as needed.						
2-5	Compare 3-Digit Numbers	Students use words and symbols to compare 3-digit numbers.	Students compare two 3-digit numbers using the verb *compare*.	Students practice strategies for persisting at a mathematical task, such as setting a small goal or setting timers for remaining focused.	2-5	compare equal to (=) greater than (>) less than (<)
Unit Review **Fluency Practice**						
Unit Assessment **Performance Task**						

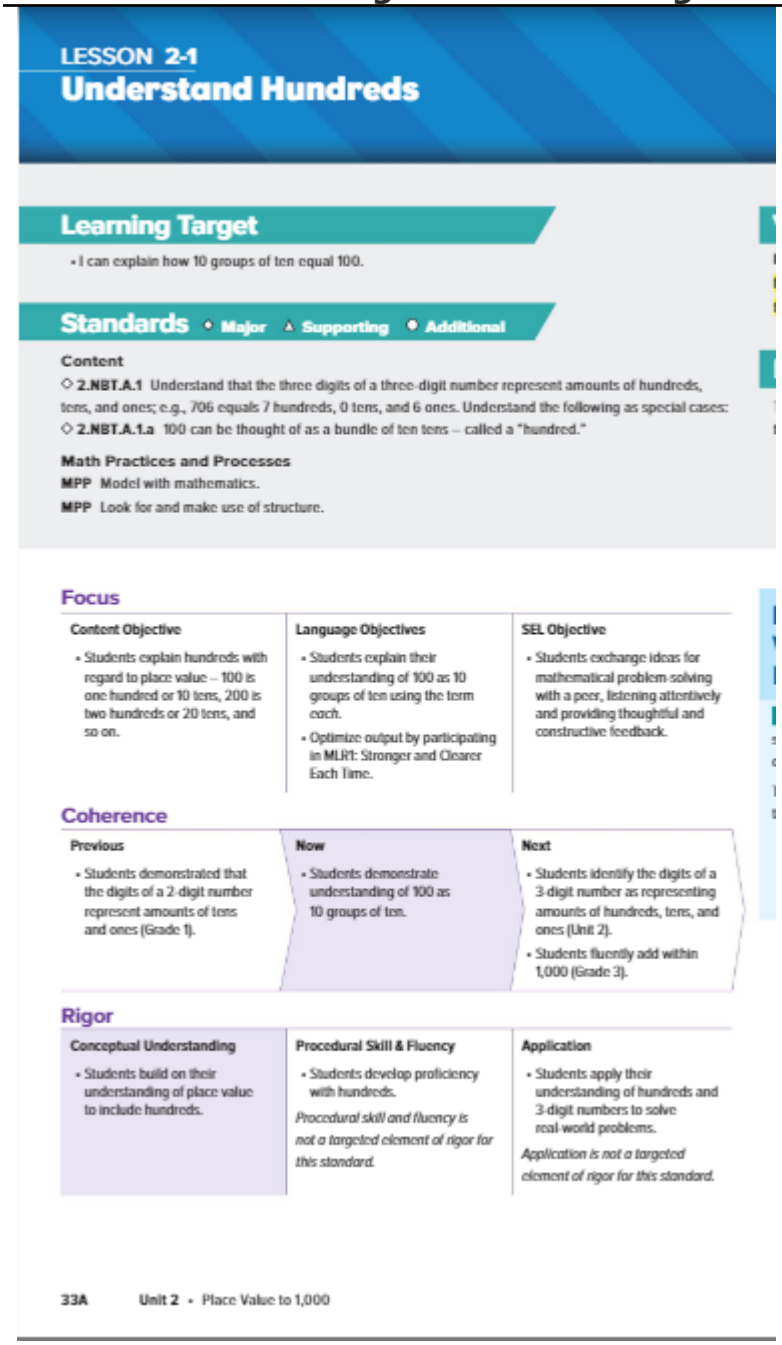
Enduring Understandings

See Above

Essential Questions

See Above

Instructional Strategies and Learning Activities



LESSON 2-1

Understand Hundreds

Learning Target

- I can explain how 10 groups of ten equal 100.

Standards ◇ Major △ Supporting ○ Additional

Content

◇ **2.NBT.A.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

◇ **2.NBT.A.1.a** 100 can be thought of as a bundle of ten tens — called a "hundred."

Math Practices and Processes

MPP Model with mathematics.

MPP Look for and make use of structure.

Focus

Content Objective

- Students explain hundreds with regard to place value – 100 is one hundred or 10 tens, 200 is two hundreds or 20 tens, and so on.

Language Objectives

- Students explain their understanding of 100 as 10 groups of ten using the term *each*.
- Optimize output by participating in MLR1: Stronger and Clearer Each Time.

SEL Objective

- Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.

Coherence

Previous

- Students demonstrated that the digits of a 2-digit number represent amounts of tens and ones (Grade 1).

Now

- Students demonstrate understanding of 100 as 10 groups of ten.

Next

- Students identify the digits of a 3-digit number as representing amounts of hundreds, tens, and ones (Unit 2).
- Students fluently add within 1,000 (Grade 3).

Rigor

Conceptual Understanding

- Students build on their understanding of place value to include hundreds.

Procedural Skill & Fluency

- Students develop proficiency with hundreds.

Procedural skill and fluency is not a targeted element of rigor for this standard.

Application

- Students apply their understanding of hundreds and 3-digit numbers to solve real-world problems.

Application is not a targeted element of rigor for this standard.

LESSON 2-2

Understand 3-Digit Numbers

Learning Targets

- I can identify the digits in a 3-digit number.
- I can show 3-digit numbers.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **2.NBT.A.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones: e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

◇ **2.NBT.A.1.b** The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Look for and make use of structure.

Focus

Content Objectives	Language Objectives	SEL Objective
• Students explain what the digits in a 3-digit number represent. • Students represent 3-digit numbers.	• Students explain that the digits of a 3-digit number represent amounts of hundreds, tens, and ones and represent 3-digit numbers using the term *notice*. • Support sense-making and cultivate conversation by participating in MLR2: Collect and Display.	• Students recognize personal strengths through thoughtful self-reflection.

Coherence

Previous	Now	Next
• Students explained that the digits of a 2-digit number represent amounts of tens and ones (Grade 1). • Students demonstrated that 100 can be thought of as 10 groups of ten (Unit 2).	• Students explain that the digits of a 3-digit number represent amounts of hundreds, tens, and ones. • Students represent 3-digit numbers.	• Students read and write numbers to 1,000 using standard, word, and expanded form (Unit 2). • Students fluently add within 1,000 (Grade 3).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of numbers to represent 3-digit numbers as groups of hundreds, tens, and ones.	• Students use their knowledge of place value to show a 3-digit number. *Procedural skill and fluency is not a targeted element of rigor for this standard.*	• Students apply their knowledge of hundreds, tens, ones to solve world problems. *Application is not a targeted element of rigor for this standard.*

LESSON 2-3

Read and Write Numbers to 1,000

Learning Targets

- I can read numbers to 1,000.
- I can write numbers to 1,000.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **2.NBT.A.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others.

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
• Students read and write numbers to 1,000.	• Students discuss and write 3-digit numbers using the term *different ways*. • Maximize meta-language by participating in MLR7: Compare and Connect.	• Students actively listen without interruption as peers describe how they approached a complex mathematical task.

Coherence

Previous	Now	Next
• Students decomposed 2-digit numbers (Grade 1). • Students represented 3-digit numbers using base-ten blocks (Unit 2).	• Students represent 3-digit numbers in word form, expanded form, and standard form. • Students use base-ten blocks to represent 3-digit numbers.	• Students decompose 3-digit numbers in different ways (Unit 2). • Students fluently add within 1,000 (Grade 3).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of 3-digit numbers to include different representations.	• Students develop proficiency with reading and writing 3-digit numbers.	• Students apply their understanding to interpret different forms of 3-digit numbers in real-world problems. *Application is not a targeted element of rigor for this standard.*

LESSON 2-4

Decompose 3-Digit Numbers

Learning Target

- I can use my understanding of place value to decompose 3-digit numbers in different ways.

Standards ◇ Major ▲ Supporting ○ Additional

Content

◇ **2.NBT.A.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones: e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.

◇ **2.NBT.A.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Math Practices and Processes

MPP Look for and make use of structure.

MPP Attend to precision

Focus

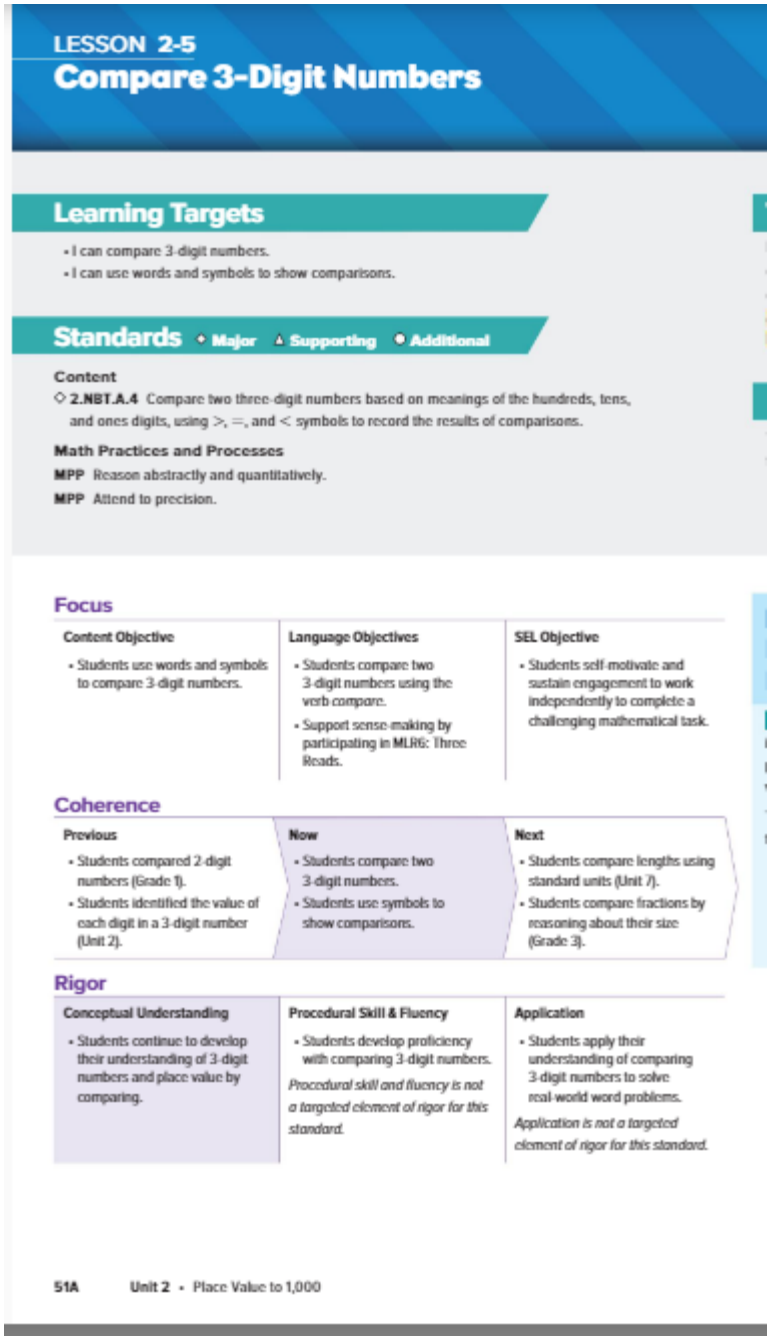
Content Objective	Language Objectives	SEL Objective
• Students can decompose a 3-digit number by grouping the hundreds, tens, and ones in different ways.	• Students identify and decompose 3-digit numbers and justify different ways to decompose the same number using the word group. • Maximize meta-language by participating in MLR8: Discussion Supports.	• Students break down a situation to identify the problem at hand.

Coherence

Previous	Now	Next
• Students decomposed 2-digit numbers (Grade 1). • Students represented 3-digit numbers in standard, word, and expanded form (Unit 2).	• Students decompose 3-digit numbers. • Students identify and justify different ways to decompose the same number.	• Students will compare 3-digit numbers (Unit 2). • Students fluently add within 1,000 (Grade 3).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students build on their understanding of 3-digit numbers and place value.	• Students develop proficiency with 3-digit numbers and place value. *Procedural skill and fluency is not a targeted element of rigor for this standard.*	• Students apply their understanding of 3-digit numbers and place value to solve real-world word problems. *Application is not a targeted element of rigor for this standard.*



LESSON 2-5

Compare 3-Digit Numbers

Learning Targets

- I can compare 3-digit numbers.
- I can use words and symbols to show comparisons.

Standards ◆ Major ▲ Supporting ● Additional

Content

◇ **2.NBT.A.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Attend to precision.

Focus

Content Objective	Language Objectives	SEL Objective
• Students use words and symbols to compare 3-digit numbers.	• Students compare two 3-digit numbers using the verb compare. • Support sense-making by participating in MLR6: Three Reads.	• Students self-motivate and sustain engagement to work independently to complete a challenging mathematical task.

Coherence

Previous	Now	Next
• Students compared 2-digit numbers (Grade 1). • Students identified the value of each digit in a 3-digit number (Unit 2).	• Students compare two 3-digit numbers. • Students use symbols to show comparisons.	• Students compare lengths using standard units (Unit 7). • Students compare fractions by reasoning about their size (Grade 3).

Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
• Students continue to develop their understanding of 3-digit numbers and place value by comparing.	• Students develop proficiency with comparing 3-digit numbers. *Procedural skill and fluency is not a targeted element of rigor for this standard.*	• Students apply their understanding of comparing 3-digit numbers to solve real-world word problems. *Application is not a targeted element of rigor for this standard.*

Integration of Career Readiness, Life Literacies and Key Skills

9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
9.1.2.CR.2	List ways to give back, including making donations, volunteering, and starting a business.
9.1.2. FI.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).

9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
9.1.2.FP.1	Explain how emotions influence whether a person spends or saves.
9.1.2.FP.3	Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).
9.4.2.DC.3	Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).
9.1.2.PB.1	Determine various ways to save and places in the local community that help people save and accumulate money over time.
9.1.2.PB.2	Explain why an individual would choose to save money.
9.4.2.DC.6	Identify respectful and responsible ways to communicate in digital environments.
9.4.2.DC.7	Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
9.4.2.TL.2	Create a document using a word processing application.
9.4.2.TL.5	Describe the difference between real and virtual experiences.
9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
9.4.2.TL.7	Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).

Technology and Design Integration

8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
8.1.2.DA.3	Identify and describe patterns in data visualizations.
8.1.2.DA.4	Make predictions based on data using charts or graphs.
8.1.2.AP.4	Break down a task into a sequence of steps.
8.1.2.AP.5	Describe a program’s sequence of events, goals, and expected outcomes.
8.2.2.ITH.4	Identify how various tools reduce work and improve daily tasks.

Interdisciplinary Connections

LA.RI.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
LA.RI.2.2	Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
LA.RI.2.3	Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
LA.RI.2.4	Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
LA.RI.2.5	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
LA.RI.2.6	Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

LA.RI.2.7	Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
LA.RI.2.8	Describe and identify the logical connections of how reasons support specific points the author makes in a text.
LA.RI.2.9	Compare and contrast the most important points presented by two texts on the same topic.
LA.RI.2.10	Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.
LA.W.2.5	With guidance and support from adults and peers, focus on a topic and strengthen writing as needed through self-reflection, revising and editing.
LA.SL.2.1	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
LA.L.2.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.

- **Definitions of Differentiation Components**:

    - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
    - Process – how the student will acquire the content information.
    - Product – how the student will demonstrate understanding of the content.
    - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:



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Modifications and Accommodations

Refer to QSAC EXCEL SMALL SPED ACCOMMOCATIONS spreadsheet in this discipline.

Modifications and Accommodations used in this unit:

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

Schoolwide Benchmark assessments:

Aimsweb benchmarks 3X a year

Linkit Benchmarks 3X a year

DRA

Additional Benchmarks used in this unit:

Reveal Unit assessments

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).

Formative Assessments used in this unit:

Teacher observation

Checklists

Questioning and Discussion

Quizzes

Summative Assessments

summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.

Summative assessments for this unit:

End of Unit assessments

Instructional Materials

See above

Standards

2.NBT.A.1	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
2.NBT.A.1.a	100 can be thought of as a bundle of ten tens — called a “hundred.”
2.NBT.A.3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
2.NBT.A.4	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.