Stage 1 Desired Results

Second Grade Module 3-Place Value, Counting, and Comparison of Numbers to 1,000

Module 3, students expand their skill with and understanding of units by bundling ones, tens, and hundreds up to a thousand with straws.

Focus Next Gen Standards:

Represent and solve problems involving addition and subtraction.

NY-2.OA.1a Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. e.g., using drawings and equations with a symbol for the unknown number to represent the problem.

NY-2.OA.1b Use addition and subtraction within 100 to develop an understanding of solving two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. e.g., using drawings and equations with a symbol for the unknown number to represent the problem.

Understand place value

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

NY-2.NBT.1a Understand 100 can be thought of as a bundle of ten tens, called a "hundred."

NY-2.NBT.1b Understand 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).

NY-2.NBT.2 Count within 1000; skip-count by 5's, 10's, and 100's.

NY-2.NBT.3 Read and write numbers to 1000 using base ten numerals, number names, and expanded form. e.g., expanded form: 237 = 200 + 30 + 7.

NY-2.NBT.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.

Work with time and money.

NY-2.MD.8a Count a mixed collection of coins whose sum is less than or equal to one dollar. e.g., If you have 2 quarters, 2 dimes and 3 pennies, how many cents do you have?

NY-2.MD.8b Solve real world and mathematical problems within one dollar involving quarters, dimes, nickels, and pennies, using the ¢ (cent) symbol appropriately. *Note:* Students are not introduced to decimals, and therefore the dollar symbol, until Grade 4.

Essential Understandings: Students will expand their skill with an understanding of units by bundling ones, tens, and hundreds up to a thousand with straws. These are discrete sets that usually consist of three units: hundreds, tens, and ones. The bundled units are organized by separating them largest to smallest, ordered from left to right. Students will experience using physical bundles that show the proportionality of the units to non-proportional place value disks and to numerals on the place value chart.

Learning Outcomes:

Students will know:

- How to use addition and subtraction within 100 to solve one step and two step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing.
- Numbers in the base-ten system up to 1,000, and being able to count in ones, fives, and tens.
- Multiples of hundreds, tens, and ones.
- Multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones.
- 100 can be thought of as a bundle of ten tens.
- Addition and subtraction can be used to solve word problems involving dollar bills, quarters, dimes, nickels, and pennies.

Students will be able to do:

- Solve problems within 1000 by applying models for addition and subtraction.
- Read and write numbers to 1000 using base ten numerals, number names, and expanded form.
- Count within 1000.
- Skip count by 5's, 10's, 100's.
- Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
- Count a mixed collection of coins whose sum is less than or equal to one dollar.
- Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies using \$ and ¢ symbols.

Vocab/ Strategies - Spanish Vocabulary Translation (NEW)

- Base ten numerals (e.g., a thousand is 10 hundreds, a hundred is 10 tens, starting in Grade 3 a one is 10 tenths, etc.)
- Expanded form (e.g., 500 + 70 + 6)
- Hundreds place (e.g., the 5 in 576 is in the hundreds place)
- One thousand (1,000)
- Place value or number disk (pictured)
- Standard form (e.g., 576)
- Unit form (e.g., 5 hundreds 7 tens 6 ones)
- Word form (e.g., five hundred seventy-six)

Suggested tools and Representations

- 2 boxes of 1,000 straws per class of 25
- Clock number line (details in Lesson 1 Fluency Practice)
- Dice, 1 per pair
- Dienes blocks
- Hide Zero cards (also known as place value cards) showing numbers 1–5, 10–50, and 100—500 (1 small set per student) (Lesson 4 Template 1))
- Hundreds place value chart (Lesson 4 Template 2)
- Meter strip (Lesson 1 Template)
- Number spelling activity sheet (Lesson 7 Activity Sheet)
- Personal white boards
- Place value box (details in Lesson 4 Concept Development)
- Place value cards to 1,000, 1 large teacher set
- Place value disks: suggested minimum of one set per pair (18 ones, 18 tens, 18 hundreds, and 1 one thousand)
- Play money: \$1, \$5, \$10, and \$100 bills (10 ones, 1 five, 12 tens, and 10 hundreds per pair), and a single set of 16 pennies, 13 dimes
- Rubber bands, 16 per pair Small plastic bags (small resealable bags)

Online place value chart and discs



Unit form modeled with place value disks: 7 hundreds 2 tens 6 ones = 72 tens 6 ones

hundreds	tens	ones		
Hundreds Place Value Chart				
100 100 100 100		000		
	Place Value Disks			

Unlabeled Hundreds Place Value Chart (use with number disks)

2nd Grade Acceleration of Learning

This document highlights important prerequisites content to standards for Grade 2 as informed by the Coherence Map (Achieve the core), Student Achievement Partners and Anet. It is meant to support planning at the module/topic level as we address unfinished learning and bridge learning gaps from the previous grade level. The document also identifies ways to provide "just-in-time support" alongside grade-level instruction. Two ways of addressing unfinished learning are suggested, please use the table below to read the document.

Category	Meaning	Suggested Actions
Highlighted in pink suggest that prerequisite skills might be addressed before grade-level instruction. This has to be decided in combination with the assessment data	Without this prior knowledge, students might struggle to access the grade-level standard. Consider data from assessments in diagnosing students' needs.	Students may require dedicated instruction on prerequisite standards before the grade level instruction is taught. (Not every standard needs its own full lesson; multiple standards may be addressed at once, or a standard might be taught as a short mini-lesson.)
Highlighted in yellow suggest that prerequisite skills addressed within grade-level instruction.	Students may have an entry point into grade-level content and will benefit from instruction that weaves in prerequisite prior-grade level content.	Individual skills/strategies listed below from these standards can be incorporated into grade-level lessons to address important content that was missed in the prior grade.

Weave in practice with 'make ten,' ''doubles' and 'near doubles' to prepare students for 2nd grade standard on knowing single digit addition and subtraction facts from memory.

Rationale: These strategies build throughout 1st grade, though students may be out of practice in using them as they've worked from home. Additionally, ensure students have regular access to manipulatives and relevant scaffolds such as hundreds of charts that help students visualize the relationships between numbers as well as the different ways we decompose numbers by place value to add and subtract. Consider planning to continue the work of 1st grade to prepare students for using strategies to find sums and differences within 20.

Module 3	NY-2.NBT.1 Understand that the digits of a three-digit number represent amounts of hundreds, tens, and ones.	←NY-1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones.	Represent numbers 11 to 19 as a ten and some ones, explain the value of each digit in a two-digit number (place value). *Use multiple representations and strategies to show/represent two-digit numbers using physical tools, drawings, and number names (2 tens is 20, 2 tens and 7 ones is 27). *Locate a two-digit number on a hundred chart and number line.
	NY-2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols	←NY-1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	Have students compare two-digit numbers and record the comparison using the symbols >, <, and =. Represent/show numbers up to 40 in multiple ways including place value charts