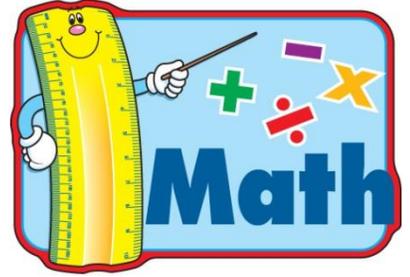


Grade 1 Math
Module 4
Place Value, Comparison, Addition
and Subtraction to 40



Overview

Grade 1, Module 4 opens in **Topic A** where students study, organize and manipulate numbers with 40. Students use fingers, linking cubes, dimes and pennies to represent numbers to 40 in various ways. **Topic B** compares quantities and begins using the symbols for greater than ($>$) and less than ($<$). Students demonstrate their understanding of place value when they recognize that 18 is less than 21 since 2 tens already have a greater value than 1 ten and 8 ones. **Topic C** focuses on addition and subtraction of tens. Having used concrete models in Topic A to represent 10 more and 10 less, students now recognize that just as $3 + 1 = 4$, 3 tens + 1 ten = 4 tens. With this understanding, students add and subtract a multiple of 10 from another multiple of 10. This topic closes with the addition of multiples of 10 to numbers less than 40 (example: $12 + 30$). In **Topic D**, students use familiar strategies to add two-digit and single-digit numbers within 40. In **Topic E**, students consider new ways to represent larger quantities when approaching *put together/take apart with total or addend unknown* and *add to with result or change unknown* word problems. Throughout this topic, students continue developing their skills with adding single-digit and double-digit numbers during fluency activities. The module closes with Topic F, focusing on adding like place value units as students add two-digit numbers. The topic begins with interpreting two-digit numbers in varied combinations of tens and ones. This flexibility in representing a given number prepares students for addition with regrouping. To close the module, students add pairs of numbers with varied sums in the ones place to support flexibility in thinking.



Module 4 Objectives

- A. Compare the efficiency of counting by ones and counting by tens.
- B. Use the place value chart to record and name tens and ones within a two-digit number.
- C. Interpret two-digit numbers as either tens and some ones or as all ones.
- D. Write and interpret two-digit numbers as addition sentences that combine tens and ones.
- E. Identify 10 more, 10 less, 1 more and 1 less than a two-digit number.
- F. Use dimes and pennies as representation of tens and ones.
- G. Compare two quantities and identify the *greater* or *less* of the two given numerals.
- H. Compare quantities and numerals from left to right.
- I. Use the symbols $>$, $=$ and $<$ to compare quantities and numerals.
- J. Add and subtract tens from a multiple of 10.
- K. Add tens to a two-digit number.
- L. Use counting on and the make ten strategy when adding across a ten.
- M. Use single-digit sums to support solutions for analogous sums to 40.
- N. Add ones and ones or tens and tens.
- O. Share and critique peer strategies for adding two-digit numbers.
- P. Use tape diagrams as representations to solve *put together/take apart with total unknown* and *add to with result unknown* word problems.
- Q. Recognize and make use of part-whole relationships within tape diagrams when solving a variety of problem types.
- R. Write word problems of varied types.
- S. Interpret two-digit numbers as tens and ones, including cases with more than 9 ones.
- T. Add a part of two-digit numbers when the ones digits have a sum less than or equal to 10.
- U. Add a part of two-digit numbers when the ones digits have a sum greater than 10.
- V. Add a pair of two-digit numbers with varied sums in the ones.

Module 4 Terminology

New Terms	Definition
$>$	greater than
$<$	less than
place value	quantity represented by a digit in a particular place within a number

