

Unit 4

Addition and Subtraction Within 200 with Word Problems to 100

Grade 2 Math

Description: Students apply their work with place value units to develop conceptual understanding of addition and subtraction within 200 moving from concrete to pictorial to abstract. This work deepens their understanding of base-ten, place value, and the properties of operations while also applying knowledge to one-step and two-step word problem situations. Students also continue to develop one of the required fluencies of the grade: addition and subtraction within 100.

Louisiana Student Standards for Mathematics (LSSM) Instructional Outcomes

Operations and Algebraic Thinking	
2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
Number and Operations in Base Ten	
2.NBT.5	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
2.NBT.6	Add up to four two-digit numbers using strategies based on place value and properties of operations.
2.NBT.7	Add and subtract within 1000 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; justify the reasoning used with a written explanation. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
2.NBT.8	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
2.NBT.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.

Enduring Understandings:

- When one quantity is joined or added on to another quantity, the result is greater than or equal to the initial quantity.
- When one quantity is removed from another quantity, the result is less than or equal to the initial quantity.
- Joining, removing, part-part-whole, and comparing problems can be modeled.
- Addition and subtraction can be composed and decomposed to simplify the operation.
- Mental math strategies may be used to solve problems involving numbers.
- Problems can be solved in a variety of ways such as modeling, number bonds, tape diagrams, counting strategies, or standard algorithms.
- Problems and solutions can use various representations, including concrete objects, pictures, number sentences, and words.

Essential Questions:

- How do we use addition and subtraction to tell number stories?
- How does using ten as a benchmark number help us add and subtract?
- How can we solve addition problems with and without composing?
- How can we solve subtraction problems with and without decomposing?
- How can strategies help us when adding and subtracting?
- How are addition and subtraction alike and how are they different?
- How do we solve problems in different ways?
- How can problem situations and problem-solving strategies be represented?
- How are problem-solving strategies alike and different?