

MATHEMATICS: GRADE 2

In Grade 2, instructional time should focus on four critical areas: 1) extending understanding of base-ten notation; 2) building fluency with addition and subtraction; 3) using standard units of measure; and 4) describing and analyzing shapes.

1. Extending Understanding of Base-Ten Notation

Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds +5 tens + 3 ones).

2. Building Fluency with Addition and Subtraction

Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.

3. Using Standard Units of Measure

Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.

4. Describing and Analyzing Shapes

Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two-and-three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Source: corestandards.org

Illinois Learning Standards: Grade 2 Overview

Operations and Algebraic Thinking <ul style="list-style-type: none">● Represent and solve problems involving addition and subtraction.● Add and subtract within 20.● Work with equal groups of objects to gain foundations for multiplication.
Number and Operations in Base Ten <ul style="list-style-type: none">● Understand place value.● Use place value understanding and properties of operations to add and subtract.
Measurement and Data <ul style="list-style-type: none">● Measure and estimate lengths in standard units.● Relate addition and subtraction to length.● Work with time and money.
Geometry <ul style="list-style-type: none">● Reason with shapes and their attributes.

Source: corestandards.org

Investigations in Number, Data, and Space 3

Scope and Sequence: Grade 2

Unit 1	Coins, Number Strings, and Story Problems Addition, Subtraction, and the Number System 1
Unit 2	Attributes of Shapes and Parts of a Whole Geometry and Fractions
Unit 3	How Many Stickers? How Many Cents? Addition, Subtraction, and the Number System 2
Unit 4	Pockets, Teeth, and Guess My Rule Modeling with Data
Unit 5	How Many Tens? How Many Hundreds? Addition, Subtraction, and the Number System 3
Unit 6	How Far Can You Jump? Linear Measurement
Unit 7	Partners, Teams, and Other Groups Foundations of Multiplication

Unit 8**Enough for the Class? Enough for the Grade?**

Addition, Subtraction, and the Number System 4

Source: Investigations in Number, Data, and Space 3 (TERC, 2017)