

Mathematics

Grade One

NJ DOE, NJSLA: In Grade 1, instructional time should focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.
New Jersey Student Learning Standards for Mathematics

Unit	Time	Overview
<u>Unit 1</u> Relating Addition & Subtraction	33 days	In this Unit, students have daily practice with the counting sequence from 1's to 20 and 10's to 100. Students use number bonds, ten frames and counters to explore the missing addend and to extend their understanding of missing addends to solve for subtraction and build their fluency skills for adding within ten. Students learn that the Commutative Property makes it possible to solve difficult missing addend problems and makes the counting-on strategy more efficient and understand that subtraction can be solved by counting-back. Using number lines, ten frames and counters students "see" the relationship between addition and subtraction and utilize addition to subtract. Students work with a balance scale to recognize that the equal sign means that the values on either side of the equal sign must be the same. Students model number stories to demonstrate that they understand what the number story is asking them to solve.
<u>Unit 2</u> Addition & Subtraction Within 20	28 days	In this Unit students spend time working with: Models and tools for teen numbers, Making a ten to add or subtract, Understanding that ten ones is a group of 10 called a ten, Finding the total of three addends using strategies such as finding partners for ten, doubles facts grouping two addends, Decomposing and composing numbers does not change their value, Use 10 as a benchmark when subtracting teen numbers, Find totals for doubles facts within 20.
<u>Unit 3</u> Solving Word Problems	25 days	In this Unit, students practice with multiple solution strategies for a single problem. Students recognize that different situations can be represented by the same equation. Students compare problems and use models to find the difference between two quantities. Students create questions based on data that they collect. Students apply their understanding of number relationships by creating true/false equations for addition and subtraction.
<u>Unit 4</u> Using 10s & 1s organize and count	18 days	In this Unit students spend time organizing objects by tens and ones, counting by tens then counting-on by ones as they explore and represent two-digit place value. Students recognize patterns for numbers after 100 using the 120 chart. Students interpret and record comparison symbols for greater than and less than and equal to. Students work to build their fluency skills for adding within ten by working in independent and partner center activities
<u>Unit 5</u> Operations with Tens and Ones	23 days	In this Unit, students spend time counting forward and backward by ten to find sums and differences and model the use of place-value language when discussing addition and subtraction of tens. Students create concrete models to solidify their understanding of tens ones equals a ten. Students apply and extend their understanding of the making-tens-strategy for two-digit addition. Students practice decomposing one or both addends with models.
<u>Unit 6</u> Geometry & Measurement	28 days	In this Unit students identify and define attributes of shapes, composing, decomposing and partitioning shapes into equal parts. Students learn to tell time to the hour and the half-hour and to extend their understanding of comparing lengths of objects from direct to indirect comparisons using a reference object and measuring by iterating a unit of measurement.

Content Continuum

Grade One Mathematics

Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.

Students compose and decompose plane or solid figures and build understanding of part-whole relationships as well as the properties of the original and composite shapes. They develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

New Jersey Student Learning Standards

Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. They use a variety of models, (e.g., cubes connected to form lengths), to model add-to, takefrom, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction. They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties to solve addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction.

Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. *New Jersey Student Learning Standards*

KEY FEATURES OF REVISION

- Incorporates 2023 NJDOE Math Standards Updates inclusive of Climate Change Guidance
- Intentional Focus on Math Discourse and Academic and Math Vocabulary
- Extensive inclusion of Prerequisite Skills
- Incorporation of Personalized Instruction - My Path lessons

INSTRUCTIONAL / SUPPLEMENTAL MATERIALS

Illustrative Mathematics

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