

Liberty Elementary First Grade Curriculum Map 2020-2021

[Vertical Progression of Standards INTERACTIVE MAP](#)

Complete Livebinder For GSE Resources Summary of Revisions to standards 2015-16	Interactive Dashboard	Eureka Math Eureka Pacing Guide	First Grade Assessments linked in the Module section Below	Number Talks
Sample Common Core HW	TE of GA Frameworks	Video Support	1st Grade FlipBook	1st Grade Roadmap

Module 1 Livebinder 1st 9 Weeks	Module 2 Livebinder 2nd 9 Weeks	Module 3 Livebinder 2nd 9 Weeks	Module 4 Livebinder 3rd 9 Weeks	Module 5 Livebinder 4th 9 Weeks	Module 6 Livebinder 4th 9 Weeks
Module 1 Sums and Differences to 10	Module 2 Intro to Place Value Through Add/Sub Within 20	Module 3 Ordering and Comparing Length Measurements as Numbers	Module 4 Place Value, Comparison, Addition and Subtraction to 40	Module 5 Identifying, Composing, and Partitioning Shapes	Module 6 Place Value, Comparison, Addition and Subtraction to 100
50 days 39 Lessons	35 days 29 Lessons	15 days 13 Lessons	35 days 29 Lessons	15 days 13 Lessons	30 days 30 lessons
Focus Standards with active links 1.OA.1 1.OA.3 1.OA.4 1.OA.5 1.OA.6 1.OA.7 1.OA.8	Focus Standards with active links 1.OA.1 1.OA.2 1.OA.3 1.OA.4 1.OA.6 1.NBT.2	Focus Standards with active links 1.MD.1 1.MD.2 1.MD.4 1.OA.1	Focus Standards with active links 1.NBT.1 1.NBT.2 1.NBT.2.a 1.NBT.2.c 1.NBT.3 1.NBT.4 1.NBT.5 1.NBT.6 1.OA.1 1.NBT.7	Focus Standards with active links 1.G.1 1.G.2 1.G.3 1.MD.3	Focus Standards with active links 1.NBT.1 1.NBT.2 1.NBT.3 1.NBT.4 1.NBT.5 1.NBT.6 1.OA.1 1.MD.3
Assessments	Assessments	Assessments	Assessments	Assessments	Assessments

***Finish Early due to holiday schedule**

These modules were written to build upon concepts from prior modules, so later modules contain tasks that depend upon the concepts addressed in earlier modules.

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Draft Non-negotiables for first grade exit:
Understand place value of tens and ones
Fact fluency to 20
Making a ten
 Recognize and count to 120 by 1/5/10's starting at any number
 RDW/math vocabulary/strategies for solving word problems

CCLS Major Emphasis Clusters

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure lengths indirectly and by iterating length units.

Key Areas of Focus for K-2: Addition and subtraction—concepts, skills, and problem solving

Required Fluency: 1.OA.6 Add and subtract within 10.

[Parent Letters for K-5](#)

Summary of Year: First Grade mathematics is about

- developing understanding of addition, subtraction, and strategies for addition and subtraction within 20;
- developing understanding of whole number relationships and place value, including grouping in tens and ones;
- developing understanding of linear measurement and measuring lengths as iterating length units; and
- reasoning about attributes of, and composing and decomposing geometric shapes

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Rationale for Module Sequence in Grade 1

In Grade 1, work with numbers to 10 continues to be a major stepping-stone in learning the place value system. In **Module 1**, students work to further understand the meaning of addition and subtraction begun in Kindergarten, largely within the context of the Grade 1 word problem types. They begin intentionally and energetically building fluency with addition and subtraction facts—a major gateway to later grades

In **Module 2**, students add and subtract within 20. Work begins by modeling “adding and subtracting across ten” in word problems and with equations. Solutions involving decomposition and composition like that shown to the right for $8 + 5$ reinforce the need to “make 10.” In Module 1, students loosely grouped 10 objects to make a ten. They now transition to conceptualizing that ten as a single unit (using 10 linking cubes stuck together, for example). This is the next major stepping-stone in understanding place value, learning to group “10 ones” as a single unit: 1 ten. Learning to “complete a unit” empowers students in later grades to understand “renaming” in the addition algorithm, to add 298 and 35 mentally (i.e., $298 + 2 + 33$), and to add measurements like 4 m, 80 cm, and 50 cm (i.e., $4\text{ m} + 80\text{ cm} + 20\text{ cm} + 30\text{ cm} = 4\text{ m} + 1\text{ m} + 30\text{ cm} = 5\text{ m } 30\text{ cm}$).

Module 3, which focuses on measuring and comparing lengths indirectly and by iterating length units, gives students a few weeks to practice and internalize “making a 10” during daily fluency activities.

Module 4 returns to understanding place value. Addition and subtraction within 40 rest on firmly establishing a “ten” as a unit that can be counted, first introduced at the close of Module 2. Students begin to see a problem like $23 + 6$ as an opportunity separate the “2 tens” in 23 and concentrate on the familiar addition problem $3 + 6$. Adding $8 + 5$ is related to solving $28 + 5$; complete a unit of ten and add 3 more.

In **Module 5**, students think about attributes of shapes and practice composing and decomposing geometric shapes. They also practice work with addition and subtraction within 40 during daily fluency activities (from Module 4). Thus, this module provides important “internalization time” for students between two intense number-based modules. The module placement also gives more spatially-oriented students the opportunity to build their confidence before they return to arithmetic.

Although **Module 6** focuses on “adding and subtracting within 100,” the learning goal differs from the “within 40” module. Here, the new level of complexity is to build off the place value understanding and mental math strategies that were introduced in earlier modules. Students explore by using simple examples and the familiar units of 10 made out of linking cubes, bundles, and drawings. Students also count to 120 and represent any number within that range with a numeral.

Module 1: Sums and Differences to 10 45 days

Represent and solve problems involving addition and subtraction. (limit to within 10 for this unit)

- 1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, e.g., by using objects, drawings and equations with a symbol for the unknown number to represent the problem. Understand and apply properties of operations and the relationship between addition and subtraction.
- 1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to

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make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)

- 1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.

Add and subtract within 20.

- 1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Work with addition and subtraction equations.

- 1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
- 1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = ? - 3$, $6 + 6 = ?$

Module 2: Introduction to Place Value Through Add/Sub Within 20 35 days

Represent and solve problems involving addition and subtraction.

- 1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- 1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction.

- 1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)

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- 1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.

Add and subtract within 20.

- 1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Understand place value

- 1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
 - a. 10 can be thought of as a bundle of ten ones – called a “ten.”
 - b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

Module 3: Ordering and Comparing Length Measurements as Numbers

15 days

Represent and solve problems involving addition and subtraction

- 1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. Measure lengths indirectly and by iterating length units.
- 1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- 1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Represent and interpret data

- 1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Module 4: Place Value, Comparison, Addition and Subtraction to 40

35 days

Represent and solve problems involving addition and subtraction

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- 1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. Extend the counting sequence.
- 1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Understand place value.

- 1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
 - a. 10 can be thought of as a bundle of ten ones – called a “ten.”
 - c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
- 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 $<$.

Use place value understanding and properties of operations to add and subtract.

- 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- 1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- 1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Module 5: Identifying, Composing, and Partitioning Shapes

15 days

Tell and write time and money

- 1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.

Reason with shapes and their attributes.

- 1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation,

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overall size); build and draw shapes to possess defining attributes.

- 1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)
- 1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

Module 6: Place Value, Comparison, Addition and Subtraction to 100 35 days

Extend the counting sequence

- 1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Understand place value.

- 1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
 - a. 10 can be thought of as a bundle of ten ones – called a “ten.”
 - c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
- 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 $<$.

Use place value understanding and properties of operations to add and subtract.

- 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- 1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count: explain the reasoning used.
- 1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

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Tell and write time and money

- 1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks. Recognize and identify coins, their names, and their value.