

• • • GRADE I: FOCUSING CALENDAR

Mathematical Practices (CCSS)		Grade Level Focus Areas	Grade Level Domains
persever	nse of problems and re in solving them.	FAI: Addition & Subtraction Developing understanding of addition, subtraction, and	MAJOR DOMAIN Operations and Algebraic Thinking
 Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others. Model with mathematics. Use appropriate tools strategically. Attend to precision. Look for and make use of structure. Look for and express regularity in repeated reasoning. 		strategies for addition and subtraction within 20.	SUPPORTING DOMAINS Number and Operations in Base Ten Measurement and Data
		FA2: Place Value Understanding Developing understanding of whole number relationships and place value, including grouping in	MAJOR DOMAIN Number and Operations in Base Ten SUPPORTING DOMAINS Operations and Algebraic Thinking
		tens and ones. FA3: Informal Linear Measurement Developing understanding of linear measurement and measuring lengths as iterating length units.	MAJOR DOMAIN Measurement and Data SUPPORTING DOMAINS Operations and Algebraic Thinking
		FA4: Composing & Decomposing Shapes Reasoning about attributes of, and composing and decomposing geometric shapes.	MAJOR DOMAIN Geometry SUPPORTING DOMAINS Measurement and Data
Weeks	Unit Topics	Notes & Cluster/Standard ID	
3-4 weeks	UNIT / Number: Counting & Place Value (CAI & CA2)	Focus on counting. (I.NBT.E) Addition & subtraction within 20 using context. (I.OA.A,B) Building place value understanding of teen numbers. (I.NBT.F)	

UNIT 2 Informal Linear Measurement (CA3)	Focus on iterating linear units. (I.MD.H,J) Make connection to a I unit and IO unit as well. (I.NBT.E)	
UNIT 3 Number: PPW, Compare, and Place Value (CAI & CA2)	Focus on building place value understanding, e.g., discuss I2 as being composed of I2 ones and also I ten and 2 ones with the key emphasis being the different units of place value being utilized. (I.NBT.E-F) Addition & subtraction within 50 using context. (I.OA.A-D)	
UNIT 4 Composing Shapes & Data (CA4)	Address attributes. (I.G.K.I.) Conduct a survey and construct a graph. (I.MD.J.) Compose and decompose 2-D shapes. (I.G.K.2.)	
UNIT 5 Number: Join, Separate and & Place Value (CAI)	Continue work on addition & subtraction within 100. (I.OA.A-D) Construct place value understanding to 100. (I.NBT.F)	
UNIT 6 Measurement Iteration and Time (CA3)	Continue work with iterating non-standard units (I.MD.H) Measure time, including using the hour hand without the minute hand. (I.MD.I.)	
UNIT 7 Number, Operations & Data (CA2)	Addition within 100 with single digit addends and multiples of 10. (I.NBT.G) Continue work on addition and subtraction within 20. (I.OA.A-D) Conduct a survey and have students construct bar graphs. (I.MD.J) Answer addition and subtraction problems based on the data. (I.MD.J, I.OA.A)	
UNIT 8 Partitioning Shapes (CA4)	Continue composing and decomposing shapes. (I.G.K) Partitioning circles and rectangles as an investigation of shape properties as well as a precursor to later work with equivalent fractions in Grade 3. (I.G.K) Conduct a survey and construct a graph. (I.MD.J)	
	Informal Linear Measurement (CA3) UNIT 3 Number: PPW, Compare, and Place Value (CA1 & CA2) UNIT 4 Composing Shapes & Data (CA4) UNIT 5 Number: Join, Separate and & Place Value (CAI) UNIT 6 Measurement Iteration and Time (CA3) UNIT 7 Number, Operations & Data (CA2) UNIT 8 Partitioning Shapes	

Inclusion Topics

Patterns, flexibility and fluency with basic addition and subtraction facts, and data analysis. Discussion and analysis of patterns should occur throughout every unit. Flexibility and fluency development of basic facts should be embedded continuously throughout the year. Lastly, data analysis is specifically included in particular units but can be extended into other units.

Appendix A

Operations and Algebraic Thinking

I.OA

A. Represent and solve problems involving addition and subtraction.

- I. 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.
- 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.

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

- 3. Apply properties of operations as strategies to add and subtract. 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.)
- 4. Understand subtraction as an unknown-addend problem. For example, subtract 10 8 by finding the number that makes 10 when added to 8.

C. Add and subtract within 20.

- 5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 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).

D. Work with addition and subtraction equations.

- 7. 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.
- 8. Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11, 5 = _ 3, 6 + 6 = _$.

Number and Operations in Base Ten

INBT

E. Extend the counting sequence.

I. Count to I20, starting at any number less than I20. In this range, read and write numerals and represent a number of objects with a written numeral.

F. Understand place value.

- 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.
 - 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).
- 3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

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

- 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.
- 5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- 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.

Measurement and Data I.MD

H. Measure lengths indirectly and by iterating length units.

- I. Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- 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.

I. Tell and write time.

3. Tell and write time in hours and half-hours using analog and digital clocks.

J. Represent and interpret data.

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.

Geometry I.G

K. Reason with shapes and their attributes.

I. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

- 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.
- 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.