

2017-18 First Grade Math Pacing Guide

Operations and Algebraic Thinking- Represent and solve problems involving addition and subtraction		Q1	Q2	Q3	Q4
1.OA.A.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)	10	10	20	20
1.OA.A.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, & equations with a symbol for the unknown number to represent the problem)				
Operations and Algebraic Thinking-Understand and apply properties of operations and the relationship between addition and subtraction					
1.OA.B.3	Apply properties of operations as strategies to add and subtract. For example: 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). Note: Students need not use formal terms for these properties.				
1.OA.B.4	Understand subtraction as an unknown-addend problem. For example: Subtract $10 - 8$ by finding the number that makes 10 when added to 8.		Introduced		
Operations and Algebraic Thinking- Add and subtract within 20					
1.OA.C.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2)				
1.OA.C.6	Add and subtract within 20, demonstrating computational 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 $12 - 8 = 4$) Note: Computational fluency is demonstrating the method of student choice. Students should understand the strategy he/she selected and be able to explain how it can efficiently produce accurate answers.		Introduced		
Operations and Algebraic Thinking- Work with addition and subtraction equations					
1.OA.D.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? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, or $4 + 1 = 5 + 2$.	10	10	20	20
1.OA.D.8	Determine the unknown whole number in an addition or subtraction equation relating three whole number. For example: Determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, and $6 + 6 = _$				
Number and Operations in Base Ten- Extend the counting sequence					
1.NBT.A.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.	20	50	100	120
Number and Operations in Base Ten- Understand place value					
1.NBT.B.2	Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: • 10 can be thought of as a bundle of ten ones — called a "ten". • The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones • 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	Progressively builds each quarter			
1.NBT.B.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$				
Numbers and Operations in Base Ten-Use place value understanding and properties of operations to add and subtract					

1.NBT.C.4	Add within 100 using concrete models or drawings, relate the strategy used to a written expression or equation, and be able to explain the reasoning. Note: Strategies should be based on place-value, properties of operations, and the relationship between addition and subtraction.				
1.NBT.C.5	Mentally find 10 more or 10 less than a given two-digit number, without having to count. Note: Students should be able to explain the reasoning used		Introduced		
1.NBT.C.6	Subtract multiples of 10 from multiples of 10 (both in the range of 10-90) using concrete models or drawings, relate the strategy to a written method, and explain the reasoning used. Note: Strategies should be based on place value, properties of operations, and the relationship between addition and subtraction. Note: Differences should be zero or positive.		Introduced		
Measurement and Data-Measure lengths indirectly and by iterating length units					
1.MD.A.1	Order three objects by length; compare the lengths of two objects indirectly by using a third object				
1.MD.A.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. Note: Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.				
Measurement and Data-Work with time and money					
1.MD.B.3	Tell and write time in hours and half-hours using analog and digital clocks. Note: The intention of this standard is to continue the introduction of the concept with the goal of mastery by the end of 3rd grade.				
1.MD. B.4	Identify and know the value of a penny, nickel, dime, and quarter	P	N	D	Q
1.MD. B.5	Count collections of like coins (pennies, nickels, and dimes)	P	N	D	
Measurement and Data- Represent and interpret data					
1.MD.C.6	Organize, represent, and interpret data with up to three categories, using tally tables, picture graphs and bar graphs. • Ask and answer questions about the total number represented, how many in each category, and how many more or less are in one category than in another.				
Geometry- Reason with shapes and their attributes					
1.G.A.1	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				
1.G.A.2	Compose two-dimensional shapes (e.g., rectangles, squares, trapezoids, triangles, half-circles, and quartercircles) or three-dimensional shapes (e.g., cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape. Note: Students do not need to learn formal names such as "right rectangular prism".				
1.G.A.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.				
The highlighted standards on the left are the Essential Standards.Shading on the right indicates standards for instruction each quarter					
			Revised 2017		