Madison County Schools
Suggested 1st Grade Math Pacing Guide

The following Standards have changes from the original 2015-16 MS College- and Career-Readiness Standards:

Significant Changes (ex: change in expecations, new Standards, or removed Standards)
1.MD.3b
1.MD.5

Slight Changes (slight change or clarification in wording)
none

Throughout the 2016 Mississippi College- and Career-Readiness Standards for Mathematics Grades K-5 Standards, the words fluency and fluently will appear in bold, italicized, and underlined font (for example: ***fluently***). With respect to student performance and effective in-class instruction, the expectations for mathematical fluency are explained below:

Fluency is not meant to come at the expense of understanding, but is an outcome of a progression of learning and sufficient thoughtful practice. It is important to provide the conceptual building blocks that develop understanding in tandem with skill along the way to fluency; the roots of this conceptual understanding often extend to one or more grades earlier in the standards than the grade when fluency is finally expected.

Wherever the word ***fluently*** appears in a MS CCR content standard, the word means quickly and accurately. It is important to understand that this is not explicitly tied to assessment purposes, but means more or less the same as when someone is said to be fluent in a foreign language. To be fluent is to flow: Fluent isn't halting, stumbling, or reversing oneself.

A key aspect of fluency is this sense that it is not something that happens all at once in a single grade but requires attention to student understanding along the way. It is important to ensure that sufficient practice and extra support are provided at each grade to allow all students to meet the standards that call explicitly for fluency.

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Domain	Abbreviation
Operations and Algebraic Thinking	**OA**
Number and Operations in Base Ten	**NBT**
Measurement and Data	**MD**
Geometry	**G**

* Builds directly off of Kindergarten Standards

1st 9 Weeks		Introduce	"Assess"
1.MD.3b	Identify the days of the week, the number of days in a week, and the number of weeks in each month.	**1**	**1**
1.MD.3a	Tell and write time in hours and half hours using analog and digital clocks.	**1**	**2**
***1.G.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**	**1**
***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.	**1**	**2**
***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. 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**	**1**
***1.OA.5**	Relate counting to addition & subtraction (e.g., by counting on 2 to add 2).	**1**	**1**

***Note*: All Standards are year-end goals. The "Assess" column indicates it is reasonable to begin *looking for progress towards mastery* within that 9 Weeks; it does not require mastery at that time.**

1st 9 Weeks Standards Continued on Next Page…

1st 9 Weeks Continued…		Introduce	"Assess"
1.OA.1	Use addition and subtraction within 20 to solve* word problems involving situations of adding to, taking from, putting together, taking apart, & 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] * See 1.OA.6"a" for strategies that can be discovered/introduced with objects and drawings. [2] See Table 1.	**1**	**2**
1.OA.3	Apply properties of operations as strategies to add and subtract.[3] *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.)* [3] Students need not use formal terms for these properties.	**1**	**2**
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.	**1**	**2**

***Note*: All Standards are year-end goals. The "Assess" column indicates it is reasonable to begin *looking for progress towards mastery* within that 9 Weeks; it does not require mastery at that time.**

2nd 9 Weeks		Introduce	"Assess"
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.*)	**2**	**2**
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 follow equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*	**2**	**3**
1.MD.1	Order three objects by length; compare the lengths of two objects indirectly by using a third object.	**2**	**2**
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*.	**2**	**2**
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 equal shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	**2**	**2**
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.[4] [4] Students do not need to learn formal terms such as "right rectangular prism."	**2**	**3**

***Note*: All Standards are year-end goals. The "Assess" column indicates it is reasonable to begin *looking for progress towards mastery* within that 9 Weeks; it does not require mastery at that time.**

3rd 9 Weeks		Introduce	"Assess"
1.OA.6"a"	Add and subtract within 20… 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).	**3**	**3**
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 = ☐.*	**3**	**3**
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.	**3**	**3**
1.MD.5a	Identify the value of all U.S. coins (penny, nickel, dime, quarter, half-dollar, and dollar coins. Use appropriate cent and dollar notation (e.g., 25 ¢, $1).	**3**	**3**
1.MD.5d	Find the equivalent value for all greater value U.S. coins using like value smaller coins (e.g., 5 pennies equal 1 nickel; 10 pennies equal 1 dime, but not 1 nickel and 5 pennies equal 1 dime).	**3**	**3**

***Note*: All Standards are year-end goals. The "Assess" column indicates it is reasonable to begin *looking for progress towards mastery* within that 9 Weeks; it does not require mastery at that time.**

4th 9 Weeks		Introduce	"Assess"
1.MD.5b	Know the comparative value of all U.S. coins (e.g., a dime is of greater value than a nickel).	**4**	**4**
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 <.	**4**	**4**
1.MD.5c	Count like U.S. coins up to the equivalent of a dollar.	**4**	**4**
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.	**4**	**4**
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 or 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.	**4**	**4**
1.OA.6"b"	Demonstrate fluency for addition and subtraction within 10.	**4**	**4**
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.	**4**	**4**

***Note*: All Standards are year-end goals. The "Assess" column indicates it is reasonable to begin *looking for progress towards mastery* within that 9 Weeks; it does not require mastery at that time.**

Table 1	Result Unknown	Change Unknown	Start Unknown
Add To	Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now? 2 + 3 = ? (K)	Two bunnies were sitting on the grass. Some more bunnies hopped there. Then there were five bunnies. How many bunnies hopped over to the first two? 2 + ? = 5 (1^{st})	Some bunnies were sitting on the grass. Three more bunnies hopped there. Then there were five bunnies. How many bunnies were on the grass before? ? + 3 = 5 One-Step Problem (2^{nd})
Take From	Five apples were on the table. I ate two apples. How many apples are on the table now? 5 – 2 = ? (K)	Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat? 5 – ? = 3 (1^{st})	Some apples were on the table. I ate two apples. Then there were three apples. How many apples were on the table before? ? – 2 = 3 One-Step Problem (2^{nd})
	Total Unknown	**Addend Unknown**	**Both Addends Unknown**
Put Together/Take Apart	Three red apples and two green apples are on the table. How many apples are on the table? 3 + 2 = ? (K)	Five apples are on the table. Three are red and the rest are green. How many apples are green? 3 + ? = 5 or 5 – 3 = ? (1^{st})	Grandma has five flowers. How many can she put in her red vase and how many in her blue vase? 5 = 0 + 5, 5 = 5 + 0 5 = 1 + 4, 5 = 4 + 1 5 = 2 + 3, 5 = 3 + 2 (K)
	Difference Unknown	**Bigger Unknown**	**Smaller Unknown**
Compare	(“How many more?” version): Lucy has two apples. Julie has five apples. How many more apples does Julie have than Lucy? (1^{st})	(Version with “more”): Julie has three more apples than Lucy. Lucy has two apples. How many apples does Julie have? One-Step Problem (1^{st})	(Version with “more”): Julie has 3 more apples than Lucy. Julie has five apples. How many apples does Lucy have? 5 – 3 = ? or ? + 3 = 5 One-Step Problem (2^{nd})
	(“How many fewer?” version): Lucy has two apples. Julie has five apples. How many fewer apples does Lucy have than Julie? 2 + ? = 5 or 5 – 2 = ? (1^{st})	(Version with “fewer”): Lucy has 3 fewer apples than Julie. Lucy has two apples. How many apples does Julie have? 2 + 3 = ? or 3 + 2 = ? One-Step Problem (2^{nd})	(Version with “fewer”): Lucy has 3 fewer apples than Julie. Julie has five apples. How many apples does Lucy have? 5 – 3 = ?, ? + 3 = 5 One-Step Problem (1^{st})

K: Problem types to be mastered by the end of the Kindergarten year. **1^{st}**: Problem types to be mastered by the end of the First Grade year, including problem types from the previous year. However, First Grade students should have experiences with all 12 problem types. **2^{nd}**: Problem types to be mastered by the end of the Second Grade year, including problem types from the previous years.