



Madison County Schools
Suggested Kindergarten Math Pacing Guide

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

Significant Changes (ex: change in expectations, new Standards, or removed Standards)

K.CC.7

K.OA.2

K.G.5

Slight Changes (slight change or clarification in wording)

K.OA.1

K.NBT.1

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.

2016 Mississippi College- and Career-Readiness Standards for Mathematics, p. 19



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

1 st 9 Weeks		Introduce	“Assess”
K.CC.1	Count to 100 by ones and by tens.	1	2
K.CC.4a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	1	1
K.CC.4b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.	1	1
K.OA.1	Represent addition and subtraction, in which all parts and whole of the problem are within 10 , with objects, fingers, mental images, drawings ² , sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations. ² Drawings need not show details, but should show the mathematics in the problem.	1	1
K.CC.3	Write numbers from 0 – 20. Represent a number of objects with a written numeral 0 – 20 (with 0 representing a count of no objects).	1	2
K.G.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).	1	1
K.G.1	Describe objects in the environment using names of shapes and describe the relative positions of these objects using terms such as <i>above</i> , <i>below</i> , <i>beside</i> , <i>in front of</i> , <i>behind</i> , and <i>next to</i> .	1	1
K.G.5	Model objects in the world by drawing two-dimensional shapes and building three-dimensional shapes.	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.

2 nd 9 Weeks		Introduce	“Assess”
K.CC.5“a”	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle.	2	2
K.CC.5“c”	Given a number from 1 – 20, count out that many objects.	2	3
K.OA.2	Solve addition and subtraction word problems* within 10 involving situations of adding to, taking from, putting together and taking apart with unknowns in all positions by using objects or drawings to represent the problem. * See Table 1.	2	3
K.OA.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	2	2
K.OA.4	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	2	2
K.G.4	Analyze and compare two- and three- dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).	2	2
K.G.2	Correctly name shapes regardless of their orientation or overall size.	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.**

3 rd 9 Weeks		Introduce	“Assess”
K.CC.5“b”	Count to answer “how many?” questions about as many as 10 things in a scattered configuration.	3	3
K.CC.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	3	3
K.CC.4c	Understand that each successive number name refers to a quantity that is one larger.	3	3
K.CC.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. ¹ ¹ Include groups with up to 10 objects.	3	3
K.MD.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. ³ ³ Limit category counts to be less than or equal to 10.	3	3
K.G.6	Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i>	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.

4 th 9 Weeks		Introduce	“Assess”
K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones to understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones , e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$).	4	4
K.CC.7	Compare two numbers between 1 and 20 presented as written numerals.	4	4
K.OA.5	<i>Fluently</i> add and subtract within 5.	4	4
K.MD.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	4	4
K.MD.2	Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i>	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. **1st**: 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. **2nd**: Problem types to be mastered by the end of the Second Grade year, including problem types from the previous years.