West Virginia College- and Career-Readiness Standards for Mathematics

KINDERGARTEN

Domain	Cluster	Standard	Code	Mathseeds Lesson # — Knowledge and Skills: Online Lesson, Printable Resources, & Problem Solving Tasks	Mathseeds Lesson # — Assessment: End-of-lesson Quiz	Mathseeds Lesson # — Higher Order Thinking Skills: Critical Thinking and Problem Solving Interactives	Additional Mathseeds Resources — Fluency: Driving Tests (DT) Mental Minute (MM)	Additional Mathseeds Resources — Assessment: Printable Achievement Standards Assessment
Counting and Cardinality	Know number names and the count sequence.	Count to 100 by ones and by tens; Count forward beginning from a given number within the known sequence; Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20.	M.K.1 M.K.2 M.K.3	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 22, 25, 28, 33, 41, 43, 45, 46, 48, 50		12, 46	**DT** Kindergarten Number 1-25	**Kindergarten Number** Test 1-4, 6
	Count to tell the number of objects.	Understand the relationship between numbers and quantities; Connect counting to cardinality; Count to answer questions about as many as 20 things; Given a number from 1-20, count out that many objects.	M.K.4 M.K.5	5, 7, 8, 11, 12, 16, 25, 31, 33, 36, 43, 45, 47, 48, 50, 63		12, 19, 30, 31, 46, 47	**DT** Kindergarten Number 1, 6, 7, 14, 18, 19	**Kindergarten Number** Test 2
	Compare numbers.	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group; Compare two numbers between 1 and 10 presented as written numerals.	M.K.6 M.K.7	18, 22, 31, 41, 43, 45, 46		38	**DT** Kindergarten Number 8, 20	**Kindergarten Number** Test 3
Operations and Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Represent addition and subtraction; Solve addition and subtraction word problems and add and subtract within 10; Fluently add and subtract within 5.	M.K.8 M.K.9 M.K.12	21, 24, 25, 30, 31, 32, 34, 36, 40, 47, 49, 50		30, 31, 36, 40, 46, 47	**DT** Kindergarten Operations 1-25 **MM** Addition Sprints **MM** Subtraction Sprints	**Kindergarten Operations** Test 1, 2, 4
		Decompose numbers less than or equal to 10 into pairs in more than one way.	M.K.10	31, 32, 34, 36, 40, 47		19, 34, 36, 40	**DT** Kindergarten Operations 9, 10	**Kindergarten Operations** Test 3
		Find the number that makes 10 when added to the given number.	M.K.11	31, 34, 36, 40		36		
Number and Operations in Base Ten	Work with numbers 11-19 to gain foundations for place value.	Compose and decompose numbers from 11 to 19 into ten ones and some further ones.	M.K.13	41, 43, 45, 46, 48, 50		43	**DT** Kindergarten Number 11, 12	**Kindergarten Number** Test 4
Measurement and Data	Describe and compare measurable attributes.	Describe measurable attributes of objects (length) and describe several measurable attributes of a single object; Directly compare two objects with a measurable attribute in common, to see which object has “more of” or “less of” the attribute, and describe the difference.	M.K.14 M.K.15	13, 26			**DT** Kindergarten Measurement 2, 3, 5, 6, 9, 10	**Kindergarten Measurement** Test 1-3
		Describe measurable attributes of objects (weight) and describe several measurable attributes of a single object; Directly compare two objects with a measurable attribute in common, to see which object has “more of” or “less of” the attribute, and describe the difference.		29, 73, 135, 172		135	**DT** Kindergarten Measurement 7, 8, 11, 12 **DT** Grade 2 Measurement 17, 18	**Kindergarten Measurement** Test 4 **Grade 2 Measurement: Informal Units** Test 6-8
		Describe measurable attributes of objects and describe several measurable attributes of a single object; Directly compare two objects with a measurable attribute in common, to see which object has “more of” or “less of” the attribute, and describe the difference.		38, 42, 89, 109, 116		38	**DT** Kindergarten Measurement 1, 4, 13-20 **DT** Grade 1 Measurement 11, 17-19 **DT** Grade 2 Measurement 1-5, 14, 16	**Kindergarten Measurement** Test 5-7 **Grade 1 Measurement: Length and Capacity** Test 6, 7 **Grade 2 Measurement: Informal Units** Test 4, 5, 8
	Classify objects and count the number of objects in each category.	Classify objects into given categories, count the numbers of objects in each category, and sort the categories by count.	M.K.16				**DT** Kindergarten Data 1-10	**Kindergarten Data** Test 1, 2
Geometry	Identify and describe shapes. & Analyze, compare, create and compose shapes.	Describe objects in the environment using names of shapes and describe the relative positions of these objects.	M.K.17	57, 78, 94, 164		57, 78, 94	**DT** Kindergarten Geometry 9-11, 13, 14 **DT** Grade 1 Geometry 4, 5, 11, 12, 14-16 **DT** Grade 2 Geometry 1, 2, 8, 9, 11-13	**Kindergarten Geometry** Test 5, 6 **Grade 1 Geometry: Shape** Test 7, 8 **Grade 2 Geometry: Shape and Movement** Test 6-8
		Correctly name shapes regardless of their orientations or overall size; Identify shapes as two-dimensional or three-dimensional; Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes; Model shapes in the world by building shapes from components and drawing shapes.	M.K.18 M.K.19 M.K.20 M.K.21	4, 6, 8, 9, 15, 23, 27, 35, 37, 44		6, 8, 15, 23, 27	**DT** Kindergarten Geometry 1-8, 15-23	**Kindergarten Geometry** Test 1-4
		Compose simple shapes to form larger shapes.	M.K.22	69		69	**DT** Kindergarten Geometry 12	**Kindergarten Geometry** Test 4

West Virginia College- and Career-Readiness Standards for Mathematics

GRADE 1

				Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Domain	**Cluster**	**Standard**	**Code**	**Online Lesson, Printable Resources, & Problem Solving Tasks**	**End-of-lesson Quiz**	**Critical Thinking and Problem Solving Interactives**	**Driving Tests (DT) Mental Minute (MM)**	**Printable Achievement Standards Assessment**
Operations and Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Use addition and subtraction within 20 to solve word problems involving various situations, with unknowns in all positions.	M.1.1	64, 68, 85, 88, 100		53, 56, 65, 68, 72, 76, 77, 83, 85, 91, 100	**MM** Addition Sprints **MM** Subtraction Sprints	**Grade 1 Number and Algebra: Operations** Test 2-5
		Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	M.1.2	51, 65		51, 83	**DT** Grade 1 Operations 2 **MM** Addition Sprints **MM** Subtraction Sprints	
	Understand and apply properties of operations and the relationship between addition and subtraction.	Apply properties of operations as strategies to add and subtract; Understand subtraction as an unknown-addend problem.	M.1.3 M.1.4	93, 100		93, 100	**DT** Grade 1 Operations 16 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 1 Number and Algebra: Operations** Test 5
	Add and subtract within 20.	Relate counting to addition and subtraction.	M.1.5	53, 58, 65, 68, 88, 95		53, 56	**DT** Grade 1 Operations 4, 5	**Grade 1 Number and Algebra: Operations** Test 1-4
		Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.	M.1.6	53, 56, 58, 64, 65, 72, 83, 85, 91, 92, 93		53, 56, 65, 68, 72, 76, 77, 83, 85, 91	**DT** Grade 1 Operations 1, 3, 6 **MM** Addition Sprints **MM** Subtraction Sprints	
	Work with addition and subtraction equations.	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.	M.1.7	76			**DT** Grade 1 Number 18 **DT** Grade 1 Operations 10, 11 **MM** Addition Sprints **MM** Subtraction Sprints	
		Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	M.1.8	51, 53, 56, 58, 65, 68, 72, 85, 91, 93, 95, 96, 98, 100		83	**DT** Grade 1 Operations 8, 12 **MM** Addition Sprints **MM** Subtraction Sprints	
Number and Operations in Base Ten	Extend the counting sequence.	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent an umber of objects with a written numeral.	M.1.9	56, 60, 67, 75, 77, 79, 81, 86, 90		56, 60, 67, 75, 77, 79, 81, 88	**DT** Grade 1 Number 1-24	**Grade 1 Number and Algebra: Whole Numbers** Test 1-9
	Understand place value.	Understand the two digits of a two-digit number represent amounts of tens and ones.	M.1.10	60, 67, 75, 81, 86, 88		60, 81, 88	**DT** Grade 1 Number 9, 10, 19, 24	**Grade 1 Number and Algebra: Place Value** Test 1-5
		Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	M.1.11	56, 60, 67, 75, 79, 81, 86, 90		81, 88	**DT** Grade 1 Number 4, 7, 13, 15, 20	**Grade 1 Number and Algebra: Place Value** Test 6
	Use place value understanding and properties of operations to add and subtract.	Add within 100.	M.1.12	53, 56, 58, 64, 65, 68, 72, 83, 85, 88, 91, 92, 93, 95, 96, 98, 100		53, 56, 65, 68, 72, 76, 77, 83, 85, 91, 95, 96, 98, 100	**DT** Grade 1 Operations 1-20 **MM** Addition Sprints **MM** Subtraction Sprints	
		Mentally find 10 more or 10 less than the number, without having to count and explain the reasoning used.	M.1.13	79		79	**DT** Grade 1 Operations 13-15, 17-20 **MM** Addition Sprints **MM** Subtraction Sprints	
		Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90.	M.1.14	96, 98		96, 98		
Measurement and Data	Measure lengths indirectly and by iterating length units.	Order three objects by length and compare the lengths of two objects indirectly by using a third object; Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object 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.	M.1.15 M.1.16	55, 84			**DT** Grade 1 Measurement 2, 4, 13, 14	**Grade 1 Measurement: Length and Capacity** Test 1-5
	Tell and write time.	Tell and write time in hours and half-hours using analog and digital clocks.	M.1.17	39, 54, 70, 87		87	**DT** Grade 1 Measurement 1, 8-10, 15, 16	**Grade 1 Measurement: Time** Test 1-6
	Represent and interpret data.	Organize, represent, 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.	M.1.18	80, 97		80	**DT** Grade 1 Data 1-4, 6, 9, 10, 12-16	**Grade 1 Statistics: Data** Test 1-5
Geometry	Reason with shapes and their attributes.	Distinguish between defining attributes versus non-defining attributes; Build and draw shapes to possess defining attributes.	M.1.19	52, 62, 69, 99		52, 62, 69	**DT** Grade 1 Geometry 1-3, 6-8, 10, 17-19	**Grade 1 Geometry: Shape** Test 1-5
		Compose two-dimensional shapes or three-dimensional shapes to create a composite shape and compose new shapes from the composite shape.	M.1.20	69		69	**DT** Grade 1 Geometry 9, 13	**Grade 1 Geometry: Shape** Test 6
		Partition circles and rectangles into equal shares. Describe the shares and wholes and understand for these examples that decomposing into more equal shares creates smaller shares.	M.1.21	61, 66			**DT** Grade 1 Patterns and Fractions 3, 5, 6, 11-14	**Grade 1 Number and Algebra: Fractions and Money** Test 1-3, 7

West Virginia College- and Career-Readiness Standards for Mathematics

GRADE 2

				Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Domain	**Cluster**	**Standard**	**Code**	**Online Lesson, Printable Resources, & Problem Solving Tasks**	**End-of-lesson Quiz**	**Critical Thinking and Problem Solving Interactives**	**Driving Tests (DT) Mental Minute (MM)**	**Printable Achievement Standards Assessment**
Operations and Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Use addition and subtraction within 100 to solve one- and two-step word problems involving various situations, with unknowns in all positions.	M.2.1	103, 110, 118, 120, 124, 125, 129, 131, 133, 137, 139, 150		112, 118, 124, 125, 128, 132, 133, 134, 136, 139, 144, 146, 147, 150	**MM** Addition Sprints **MM** Subtraction Sprints	**Grade 1 Number and Algebra: Operations** Test 6 **Grade 2 Number and Algebra: Addition and Subtraction** Test 1-8
	Add and subtract within 20.	Fluently add and subtract within 20 using mental strategies.	M.2.2	140, 142			**DT** Grade 2 Operations 2, 5, 22 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 2 Number and Algebra: Addition and Subtraction** Test 1, 2
	Work with equal groups of objects to gain foundations for multiplication.	Determine whether a group of objects has an odd or even number of members; Write an equation to express an even number as a sum of two equal addends.	M.2.3	108, 166		108	**DT** Grade 2 Operations 3	
		Use addition to find the total number of objects arranged in rectangular arrays; Write an equation to express the total as a sum of equal addends.	M.2.4	111, 113, 115, 130		113, 130, 136	**DT** Grade 2 Operations 6, 8-12, 19 **MM** Addition Sprints **MM** Multiplication Sprints	**Grade 2 Number and Algebra: Equal Groups** Test 1-5
Number and Operations in Base Ten	Understand place value.	Understand that the three digits of a three-digit number represent amounts of hundreds, tens and ones; Read and write numbers to 1000 using base-ten numerals, number names and expanded form.	M.2.5 M.2.7	101, 105, 106, 117, 122, 133, 140		101, 105, 106, 117	**DT** Grade 2 Number 1-24	**Grade 2 Number and Algebra: Numbers to 1000** Test 1-7
		Count within 1000 and skip-count by 5s, 10s and 100s.	M.2.6	101, 106, 117, 133, 137		117	**DT** Grade 2 Number 1-7, 9-13, 16-18 **DT** Grade 1 Patterns and Fractions 7-10 **DT** Grade 2 Patterns and Fractions 1-4, 6-10, 13	**Grade 1 Number and Algebra: Patterns** Test 1-7 **Grade 2 Number and Algebra: Number Patterns** Test 1-8
		Compare two three-digit numbers based on meanings of the hundreds, tens and ones digits, using >, =, and < symbols to record the results of comparisons.	M.2.8	101, 106, 122		106	**DT** Grade 2 Number 14, 15	**Grade 2 Number and Algebra: Numbers to 1000** Test 6
	Use place value understanding and properties of operations to add and subtract.	Fluently add and subtract within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction; Add up to four two-digit numbers using strategies based on place value and properties of operations.	M.2.9 M.2.10	103, 110, 118, 120, 124, 128, 129, 134, 140, 142, 150		118, 124, 133, 139, 144, 146, 150	**DT** Grade 2 Operations 1, 2, 4, 5, 14-17 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 2 Number and Algebra: Addition and Subtraction** Test 1-8
		Add and subtract within 1000.	M.2.11	128, 134, 140, 144, 146, 150		134, 144, 146	**DT** Grade 2 Operations 18, 24-28 **MM** Addition Sprints **MM** Subtraction Sprints	
		Mentally add 10 or 100 to a given number 100-900 and mentally subtract 10 or 100 from a given number 100-900.	M.2.12	148		148	**DT** Grade 2 Operations 7, 13, 21, 24, 27, 28 **MM** Addition Sprints **MM** Subtraction Sprints	
Measurement and Data	Measure and estimate lengths in standard units.	Measure the length of an object by selecting and using appropriate tools; Measure the length of an object twice, using length units of different lengths for the two measurements, describe how the two measurements relate to the size of the unit chosen; Estimate lengths using units of inches, feet, centimeters, and meters; Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	M.2.14 M.2.15 M.2.16 M.2.17	104, 126, 140		104, 141	**DT** Grade 2 Measurement 6, 9, 11, 13, 15, 19, 21-24	**Grade 2 Measurement: Informal Units** Test 1, 2, 8
	Relate addition and subtraction to length.	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units and equations with a symbol for the unknown number to represent the problem.	M.2.18	141, 143		104, 141	**MM** Addition Sprints **MM** Subtraction Sprints	
		Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers and represent whole-number sums and differences within 100 on a number line diagram.	M.2.19	101, 103, 110, 117, 129, 139, 144, 146, 150		110, 113, 130, 136, 139	**DT** Grade 2 Operations 1, 4, 14, 15	**Grade 2 Number and Algebra: Numbers to 1000** Test 4
	Work with time and money.	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	M.2.20	114, 123, 127			**DT** Grade 2 Measurement 7, 10, 20	**Grade 2 Measurement: Time** Test 1-5
		Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately.	M.2.21	64, 83, 92, 125, 147, 159		125, 130, 147	**DT** Grade 1 Measurement 3, 5-7 **DT** Grade 2 Measurement 12	**Kindergarten Number** Test 5 **Grade 1 Number and Algebra: Fractions and Money** Test 4-8 **Grade 2 Number and Algebra: Fractions and Money** Test 5-8
	Represent and interpret data.	Generate measurement data by measuring lengths of several objects; Show the measurements by making a line plot; Draw a picture graph and a bar graph to represent a data set with up to four categories; Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	M.2.22 M.2.23	143			**DT** Grade 2 Data and Chance 1, 4, 5, 7-14	**Grade 2 Statistics: Data** Test 1-6
Geometry	Reason with shapes and their attributes.	Recognize and draw shapes having specified attributes. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	M.2.24	102, 119, 121, 145		102, 119, 121, 140	**DT** Grade 2 Geometry 3-7, 10	**Grade 2 Geometry: Shape and Movement** Test 1-5
		Partition a rectangle into rows and columns of same-size squares and count to find the total number of them; Partition circles and rectangles into equal shares. Describe the shares and whole; Recognize that equal shares of identical wholes needs not have the same shape.	M.2.25 M.2.26	132			**DT** Grade 2 Patterns and Fractions 5, 11, 12, 14-17	**Grade 2 Number and Algebra: Fractions and Money** Test 1-4

West Virginia College- and Career-Readiness Standards for Mathematics

GRADE 3

Domain	Cluster	Standard	Code	Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
				Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Interpret products of whole numbers.	M.3.1	74, 155		153, 168, 176, 181, 186, 188, 196	**MM** Multiplication Sprints	
		Interpret whole-number quotients of whole numbers.	M.3.2	71, 136, 165, 181, 190			**MM** Division Sprints	
		Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays and measurement quantities.	M.3.3	168, 196		168, 196	**MM** Multiplication Sprints **MM** Division Sprints	
		Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	M.3.4	186		186	**MM** Multiplication Sprints **MM** Division Sprints	
	Understand properties of multiplication and the relationship between multiplication and division.	Apply properties of operations as strategies to multiply and divide; Understand division as an unknown-factor problem.	M.3.5 M.3.6	181, 190		181	**MM** Multiplication Sprints **MM** Division Sprints	
	Multiply and divide within 100.	Fluently multiply and divide within 100, using various strategies.	M.3.7	155, 158, 165, 168, 171, 176, 196, 199		186, 188, 193, 199	**MM** Multiplication Sprints **MM** Division Sprints	
	Solve problems involving the four operations, and identify and explain patterns in arithmetic.	Solve two-step word problems using the four operations, represent these problems using equations with a letter standing for the unknown quantity.	M.3.8	183, 188, 193, 195		183, 188, 193, 195	**MM** Addition Sprints **MM** Subtraction Sprints **MM** Multiplication Sprints **MM** Division Sprints	
		Identify arithmetic patterns and explain those using properties of operations.	M.3.9	153		153, 195		
Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Use place value understanding to round whole numbers to the nearest 10 or 100.	M.3.10	129, 194		194		
		Fluently add and subtract within 1000 using strategies and algorithms.	M.3.11	163, 170, 173, 178		170, 172, 178, 183, 188, 195	**MM** Addition Sprints **MM** Subtraction Sprints	
		Multiply one-digit whole numbers by multiples of 10 in the range 10-90 using strategies based on place value and properties of operations.	M.3.12	155, 165, 171, 176, 188, 190			**MM** Multiplication Sprints **MM** Division Sprints	
Number and Operations – Fractions	Develop understanding of fractions as numbers.	Understand a fraction *1/b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; Understand a fraction *a/b* as the quantity formed by *a* parts of size *1/b*.	M.3.13	138, 160, 175, 191		191		
		Understand a fraction as a number on the number line and represent fractions on a number line diagram.	M.3.14	160, 180, 191		180		
		Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.	M.3.15	160, 175, 180, 191, 197		180, 197		
Measurement and Data	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	Tell and write time to the nearest minute, measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes.	M.3.16	162, 179, 185, 189		179, 185, 189, 199		
		Measure and estimate liquid volumes and masses of objects using standard units. Add, subtract, multiply or divide to solve one-step word problems involving masses or volumes that are given in the same units to represent the problem.	M.3.17	116, 135, 154, 172		154		
	Represent and interpret data.	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs; Generate measurement data by measuring lengths. Show the data by making a line plot.	M.3.18 M.3.19	174, 182, 187, 198		187		
	Geometric measurement.	Understand concepts of area and relate area to multiplication and to addition.	M.3.20 M.3.21 M.3.22	59, 112, 149, 157, 200		59, 149	**DT** Grade 2 Measurement 6	**Grade 2 Measurement: Informal Units** Test 3, 8
		Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	M.3.23	192				
Geometry	Reason with shapes and their attributes.	Understand that shapes in different categories may share attributes, that the shared attributes can define a larger category. Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	M.3.24	169, 184				