



Mathseeds Lessons and Ohio's Learning Standards for Mathematics



KINDERGARTEN

Domains	Standards	Codes	Mathseeds Lesson #			Additional Mathseeds Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Counting and Cardinality	Count to 100; Count forward; Write numbers 0–20.	K.CC.1, K.CC.2, K.CC.3	1, 2, 3, 5, 7, 18, 19, 25, 28, 50		19	DT Early Number 2, 4, 5, 9–13, 16, 17, 21, 23	Kindergarten Number Tests 1, 2
	Understand the relationship between numbers and quantities; Connect counting to cardinality; Count to answer "how many?" questions.	K.CC.4, K.CC.5	10, 11, 12, 14, 16, 17, 20, 21, 31, 33, 48		12, 19, 41, 43	DT Early Number 1, 3, 14, 15, 22	Kindergarten Number Test 2
	Identify greater than, less than, or equal; Compare two numbers.	K.CC.6, K.CC.7	22		12, 30, 41	DT Early Number 6–8, 18–20	Kindergarten Number Test 3
Operations and Algebraic Thinking	Represent addition and subtraction; Add and subtract within 10; Decompose numbers; Find the number that makes 10 when added to the given number; Fluently add and subtract within 5.	K.OA.1, K.OA.2, K.OA.3, K.OA.4, K.OA.5	24, 30, 32, 34, 36, 40, 47, 49		12, 19, 30, 34, 36, 40, 41, 43, 47	DT Early Operations 1–14, 16–20 MM Addition Sprints MM Subtraction Sprints	Kindergarten Operations Tests 1–4
Number and Operations in Base Ten	Compose and decompose numbers from 11 to 19.	K.NBT.1	41, 43, 45, 46		41, 43	DT Early Operations 2, 6, 9	Kindergarten Number Test 4
Measurement and Data	Describe objects in terms of length; Directly compare two objects to see which is longer/shorter.	K.MD.1, K.MD.2	13, 26			DT Early Measurement 2, 3, 5, 6, 9, 10	Kindergarten Measurement Tests 1–3
	Describe objects in terms of weight; Directly compare two objects to see which is heavier/lighter.	K.MD.1, K.MD.2	29			DT Early Measurement 7, 8, 12	Kindergarten Measurement Test 4
	Describe objects in terms of capacity; Directly compare two objects to see which hold more/less.	K.MD.1, K.MD.2	38			DT Early Measurement 11, 15, 16	Kindergarten Measurement Test 5
	Classify objects into given categories; Count the numbers of objects in each category.	K.MD.3	8, 23		6, 8, 15, 23, 27	DT Early Data 1–10	Kindergarten Data Test 1
Geometry	Describe objects in the environment using names of shapes, and describe the relative positions.	K.G.1				DT Early Geometry 9–11, 13–14	Kindergarten Geometry Test 5
	Name two-dimensional shapes; Describe and compare two-dimensional shapes.	K.G.2, K.G.4	4, 6, 9, 15, 23, 27, 37		6, 15, 23	DT Early Geometry 1–8, 19, 20	Kindergarten Geometry Test 4
	Name three-dimensional shapes; Describe and compare three-dimensional shapes.	K.G.2, K.G.4	35, 44			DT Early Geometry 15–18, 21–23	Kindergarten Geometry Test 2
	Identify shapes as two-dimensional or three-dimensional.	K.G.3				DT Early Geometry 19–20	Kindergarten Geometry Test 3
	Combine simple shapes to form larger shapes.	K.G.6				DT Early Geometry 12	Kindergarten Geometry Test 12



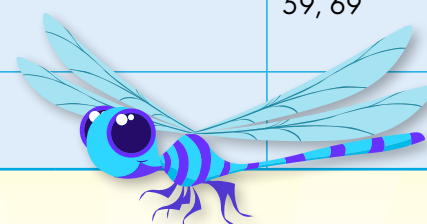


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GRADE 1

Domains	Standards	Codes	Mathseeds Lesson #			Additional Mathseeds Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Operations and Algebraic Thinking	Use addition and subtraction within 20; Solve problems that call for addition of three whole numbers.	1.OA.1, 1.OA.2	51, 53		51, 53, 56, 65, 68, 77, 83, 91, 93, 96	DT Grade 1 Operations 2	Grade 1 Number and Algebra: Operations Tests 3, 4
	Apply properties of operations as strategies to add and subtract; Understand subtraction as an unknown-addend problem.	1.OA.3, 1.OA.4	93, 100		91, 96	DT Grade 1 Operations 6, 16 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Operations Test 5
	Relate counting to addition and subtraction; Add and subtract within 20 using strategies.	1.OA.5, 1.OA.6	56, 58, 68, 72, 77, 85			DT Grade 1 Operations 1, 3, 4, 5, 7, 9 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Operations Tests 1, 2
	Understand the meaning of the equal sign.	1.OA.7	76			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.	1.OA.8	53, 65			DT Grade 1 Operations 8 MM Addition Sprints MM Subtraction Sprints	
Number and Operations in Base Ten	Count to 120.	1.NBT.1	60, 67, 75, 90		60, 63, 79, 80, 88	DT Grade 1 Number 1–6, 8, 11–17, 21–24	Grade 1 Number and Algebra: Whole Numbers Tests 1–9
	Understand that the two digits of a two-digit number represent amounts of tens and ones.	1.NBT.2	88		67, 88	DT Grade 1 Number 9, 10, 19	Grade 1 Number and Algebra: Whole Numbers Tests 1–5
	Compare two two-digit numbers with the symbols $>$, $=$, and $<$.	1.NBT.3	81, 86		60, 80, 83	DT Grade 1 Number 7, 18	Grade 1 Number and Algebra: Whole Numbers Test 6
	Add within 100 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	1.NBT.4	95, 96		68, 93, 96	DT Grade 1 Operations 18 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Operations Test 6
	Given a two-digit number, mentally find 10 more or 10 less than the number; Subtract multiples of 10.	1.NBT.5, 1.NBT.6	79, 98			DT Grade 1 Operations 13, 14, 19, 20 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Patterns Tests 1–7
Measurement and Data	Order three objects by length; Express the length of an object as a whole number.	1.MD.1, 1.MD.2	84			DT Grade 1 Measurement 2, 4, 13, 14	Grade 1 Measurement: Length Tests 1–5
	Tell and write time in hours and half-hours using analog and digital clocks. Identify pennies and dimes by name and value.	1.MD.3	54, 64, 70, 83, 87, 92		87	DT Grade 1 Measurement 1, 8, 9, 10, 15	Grade 1 Measurement: Time Tests 1–5
	Organize, represent, and interpret data.	1.MD.4	80, 97		80	DT Grade 1 Data 1–4, 6, 9, 10, 12–16	Grade 1 Statistics: Data Tests 1–5
Geometry	Distinguish defining attributes of shapes; Compose two-dimensional and three-dimensional shapes.	1.G.1, 1.G.2	52, 62, 69, 99		59, 69	DT Grade 1 Geometry 9, 10, 13	Grade 1 Geometry: Shape Tests 1–7
	Partition circles and rectangles into two and four equal shares.	1.G.3	61, 66			DT Grade 1 Patterns and Fractions 5, 6, 13, 14	Grade 1 Number and Algebra: Fractions and Money Tests 1, 2





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GRADE 2

Domains	Standards	Codes	Mathseeds Lesson #			Additional Mathseeds Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Operations and Algebraic Thinking	Use addition and subtraction within 100 to solve one- and two-step word problems.	2.OA.1	118, 131, 137, 139		112, 118, 124, 125, 128, 132, 133, 134, 136, 139, 144, 146, 147, 150		Grade 2 Number and Algebra: Addition and Subtraction Test 9
	Fluently add and subtract within 20 using mental strategies.	2.OA.2	142			DT Grade 2 Operations 2, 5, 22 MM Addition Sprints MM Subtraction Sprints	Grade 2 Number and Algebra: Addition and Subtraction Test 1
	Determine whether a group of objects is odd or even.	2.OA.3	108		108	DT Grade 2 Operations 3	Grade 2 Number and Algebra: Numbers to 1000 Test 6
	Use addition to find the total of rectangular arrays.	2.OA.4	111, 113, 115, 130		113, 130, 136	DT Grade 2 Operations 8, 9, 10, 19 MM Multiplication Sprints	Grade 2 Number and Algebra: Equal Groups Tests 1–5
Number and Operations in Base Ten	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.	2.NBT.1	105, 129		105	DT Grade 2 Number 4, 8, 16, 18–22	Grade 2 Number and Algebra: Numbers to 1000 Tests 5, 8
	Count within 1000; skip-count by 5s, 10s, and 100s.	2.NBT.2	101, 117		105, 112, 132, 133	DT Grade 2 Number 2, 3, 6, 7, 9–13, 17 DT Grade 2 Patterns and Fractions 1–4, 6–10, 13	Grade 2 Number and Algebra: Number Patterns Tests 1–7
	Read and write numbers to 1000 using base-ten numerals, number names, expanded form, and equivalent representations.	2.NBT.3	106			DT Grade 2 Number 1, 5, 23, 24	Grade 2 Number and Algebra: Numbers to 1000 Tests 1, 2, 3, 4
	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols.	2.NBT.4	122			DT Grade 2 Number 14, 15	Grade 2 Number and Algebra: Numbers to 1000 Test 7
	Fluently add and subtract within 100 using strategies based on place value; Add up to four two-digit numbers.	2.NBT.5, 2.NBT.6	103, 110, 120, 124, 133, 144, 146, 150			DT Grade 2 Operations 1, 4, 7, 13–17, 20, 23 MM Addition Sprints MM Subtraction Sprints	Grade 2 Number and Algebra: Addition and Subtraction Tests 2, 3, 4, 7
	Add and subtract within 1000.	2.NBT.7	128, 134		134, 144, 146	DT Grade 2 Operations 18, 24, 25, 26 MM Addition Sprints MM Subtraction Sprints	Grade 2 Number and Algebra: Addition and Subtraction Tests 5, 6, 8
	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	2.NBT.8	148			DT Grade 2 Operations 27, 28 MM Addition Sprints MM Subtraction Sprints	
Measurement and Data	Measure and estimate lengths using units of inches, feet, centimeters, and meters.	2.MD.1, 2.MD.3, 2.MD.4	104, 126			DT Grade 2 Measurement 9, 11, 13, 15, 21, 22, 23, 24	Grade 2 Measurement: Informal Units Tests 3–7
	Relate addition and subtraction to length.	2.MD.5, 2.MD.6	141			DT Grade 2 Measurement 19	Grade 2 Measurement: Informal Units Test 8
	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	2.MD.7	114, 123, 127			DT Grade 2 Measurement 7, 20	Grade 2 Measurement: Time Tests 1–6
	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies.	2.MD.8	125, 147		125, 147	DT Grade 2 Measurement 12	Grade 2 Number and Algebra: Fractions and Money Tests 4–7
	Represent and interpret data.	2.MD.9, 2.MD.10	143			DT Grade 2 Data and Chance 1, 4, 5, 7–14	Grade 2 Statistics: Data Tests 1–5
Geometry	Recognize and identify triangles, quadrilaterals, pentagons, and hexagons, cubes, rectangular prisms, cones, and cylinders.	2.G.1	119, 121, 145		102, 119, 121, 140	DT Grade 2 Geometry 3–7, 10	Grade 2 Geometry: Shapes Tests 1–5
	Partition circles and rectangles into two, three, or four equal shares; Recognize that equal shares of identical wholes need not have the same shape.	2.G.3	132			DT Grade 2 Patterns and Fractions 11, 12, 14, 16	Grade 2 Number and Algebra: Fractions and Money Tests 1–3



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GRADE 3



Domains	Standards	Codes	Mathseeds Lesson #			Additional Mathseeds Resources
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency
			Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Mental Minute (MM)
Operations and Algebraic Thinking	Interpret products of whole numbers.	3.OA.1	155			MM Multiplication Sprints
	Interpret whole-number quotients of whole numbers.	3.OA.2	165			MM Division Sprints
	Use multiplication and division within 100 to solve word problems.	3.OA.3	168, 196			
	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	3.OA.4	186			MM Multiplication Sprints MM Division Sprints
	Apply properties of operations as strategies to multiply and divide; Understand division as an unknown-factor problem.	3.OA.5, 3.OA.6	181, 190		153, 168, 176, 181, 186, 188, 196	MM Multiplication Sprints MM Division Sprints
	Fluently multiply and divide within 100.	3.OA.7	158, 171, 176, 199		186, 188, 193, 199	MM Multiplication Sprints MM Division Sprints
	Solve two-step word problems using the four operations.	3.OA.8	183, 188, 195		154, 159, 163, 170, 172, 178, 183, 188, 193, 194, 195, 196, 199	
	Identify arithmetic patterns and explain them using properties of operations.	3.OA.9	153, 166		170, 182, 188, 193, 196	
Number and Operations in Base Ten	Use place value understanding to round whole numbers to the nearest 10 or 100.	3.NBT.1	194			
	Fluently add and subtract within 1000.	3.NBT.2	163, 170, 173, 178			MM Addition Sprints MM Subtraction Sprints
	Multiply one-digit whole numbers by multiples of 10.	3.NBT.3	193			MM Multiplication Sprints
Number and Operations- Fractions	Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts.	3.NF.1	175			
	Understand a fraction as a number on the number line; represent fractions on a number line diagram.	3.NF.2	160		175, 180, 191, 197	
	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	3.NF.3	180, 197			
Measurement and Data	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems by adding and subtracting with dollars and cents.	3.MD.1	159, 162, 179, 185, 189			
	Measure and estimate volumes of objects using standard units of liters. Add, subtract, multiply, or divide to solve one-step word problems.	3.MD.2	154		154	
	Measure and estimate masses of objects using standard units of grams (g) and kilograms (kg). Add, subtract, multiply, or divide to solve one-step word problems.	3.MD.2	172		172	
	Represent and interpret data.	3.MD.3, 3.MD.4	174, 182, 187, 198			
	Understand concepts of area measurement. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). Relate area to the operations of multiplication and addition.	3.MD.5, 3.MD.6, 3.MD.7	157, 200			
	Solve real-world and mathematical problems involving perimeters of polygons.	3.MD.8	192			
Geometry	Draw and describe triangles, quadrilaterals, and polygons (up to 8 sides) based on the number of sides and the presence or absence of square corners (right angles).	3.G.1	169			
	Partition shapes into parts with equal areas.	3.G.2	184			

