Mathseeds Lessons and Indiana Academic Standards

KINDERGARTEN

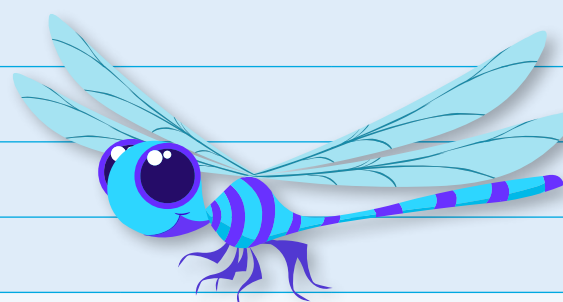| Domains	Standards	Codes	Mathseeds Lesson #			Additional Mathseeds Resources	
			Knowledge and Skills	**Assessment**	**Higher Order Thinking Skills**	**Fluency**	**Assessment**
			Online Lesson and Printable Resources	End-of-lesson Quiz	Critical Thinking and Problem Solving Worksheets	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number Sense	Count to 100; Write whole numbers 0-20; Find the number that is one more than or one less than.	K.NS.1, K.NS.2, K.NS.3	1, 2, 3, 5, 7, 18, 19, 25, 28, 50			**DT** Number 2, 4, 5, 9–13, 16, 17, 21, 23	**Kindergarten Number** Tests 1, 2
	Say the number names in standard order; Count up to 20 objects.	K.NS.4, K.NS.5	10, 11, 12, 14, 16, 17, 20, 21, 33, 48			**DT** Number 1, 3, 14, 15, 22	**Kindergarten Number** Test 2
	Recognize sets of 1 to 10 objects in patterned arrangements.	K.NS.6	31				
	Identify greater than, less than, or equal; Compare two numbers; Use correctly the words for comparison.	K.NS.7, K.NS.8, K.NS.9	22			**DT** Number 6–8, 18–20	**Kindergarten Number** Test 3
	Develop initial understandings of place value and the base 10 number system.	K.NS.11	41, 43, 45, 46			**DT** Operations 2, 6, 9	
Computation 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.	K.CA.1, K.CA.2, K.CA.3, K.CA.4	24, 30, 32, 34, 36, 40, 47, 49			**DT** Operations 1–14, 16–20 **MM** Addition Sprints **MM** Subtraction Sprints	**Kindergarten Operations** Tests 1–4
	Create, extend, and give a rule for simple repeating and growing patterns.	K.CA.5	8, 27, 37			**DT** Patterns 1–9	**Kindergarten Number** Test 4
Geometry	Describe the positions of objects and geometric shapes.	K.G.1				**DT** Geometry 9–11, 13–14	**Kindergarten Measurement** Test 5
	Compare two-dimensional shapes in different sizes and orientations.	K.G.2	4, 6, 9, 15, 23			**DT** Geometry 1–8, 19, 20	**Kindergarten Measurement** Tests 1, 3
	Compare three-dimensional shapes in different sizes and orientations.	K.G.2	35, 44			**DT** Geometry 15–18, 21–23	**Kindergarten Geometry** Test 2
	Compose simple shapes to form larger shapes.	K.G.4				**DT** Geometry 12	**Kindergarten Geometry** Test 4
Measurement	Make direct comparisons of length. Recognize which object is shorter, longer, or taller.	K.M.1	13, 26			**DT** Measurement 2, 3, 5, 6, 9, 10	**Kindergarten Measurement** Tests 1–3
	Make direct comparisons of weight. Recognize which object is lighter, or heavier.	K.M.1	29			**DT** Measurement 7, 8, 12	**Kindergarten Measurement** Test 4
	Make direct comparisons of capacity. Recognize which object holds more or holds less.	K.M.1	38			**DT** Measurement 11, 15, 16	**Kindergarten Measurement** Test 5
	Understand concepts of time; Understand that clocks and calendars are tools that measure time.	K.M.2	39, 42			**DT** Measurement 1, 4, 13, 14, 17, 18, 19	**Kindergarten Measurement** Tests 6, 7
Data Analysis	Identify, sort, and classify objects by size, number, and other attributes.	K.DA.1	23			**DT** Data 1–10	

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GRADE 1

			Mathseeds Lesson #			Additional Mathseeds Resources	
			Knowledge and Skills	**Assessment**	**Higher Order Thinking Skills**	**Fluency**	**Assessment**
Domains	**Standards**	**Codes**	**Online Lesson and Printable Resources**	**End-of-lesson Quiz**	**Critical Thinking and Problem Solving Worksheets**	**Driving Tests (DT) Mental Minute (MM)**	**Printable Achievement Standards Assessment**
Number Sense	Count to 120. Read and write numerals.	1.NS.1	60, 67, 75			**DT** Grade 1 Number 1–6, 8, 11–17, 21–24	**Grade 1 Number and Algebra: Whole Numbers** Tests 1–9
	Understand that the numbers from 11 to 19 are composed of a ten and ones; Show equivalent forms of whole numbers as groups of tens and ones.	1.NS.2, 1.NS.6	88			**DT** Grade 1 Number 9, 10, 19	**Grade 1 Number and Algebra: Whole Numbers** Tests 1–5
	Match ordinal numbers.	1.NS.3	63				
	Use place value to compare two two-digit numbers using the symbols >, =, and <.	1.NS.4	81, 86			**DT** Grade 1 Number 7, 18	**Grade 1 Number and Algebra: Whole Numbers** Test 6
	Given a two-digit number, mentally find 10 more or 10 less than the number.	1.NS.5	79, 98			**DT** Grade 1 Operations 13, 14, 17, 19, 20	**Grade 1 Number and Algebra: Patterns** Tests 1–7
Computation and Algebraic Thinking	Demonstrate fluency with addition facts and the corresponding subtraction facts within 20.	1.CA.1	93			**DT** Grade 1 Operations 6, 16 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 1 Number and Algebra: Operations** Test 5
	Solve real-world problems involving addition and subtraction within 20.	1.CA.2	53, 56, 58, 68, 72, 85			**DT** Grade 1 Operations 1–5, 7, 9	**Grade 1 Number and Algebra: Operations** Tests 1–4
	Solve problems that call for the addition of three whole numbers.	1.CA.4	51, 65			**DT** Grade 1 Operations 8, 12	
	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.CA.5	95, 96, 100			**DT** Grade 1 Operations 18 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 1 Number and Algebra: Operations** Test 6
	Understand the meaning of the equal sign.	1.CA.6	76			**DT** Grade 1 Operations 10, 11 **MM** Addition Sprints **MM** Subtraction Sprints	
	Create, extend, and give an appropriate rule for number patterns using addition within 100.	1.CA.7	77, 90			**DT** Grade Operations 1 7–10, 12	**Grade 1 Number and Algebra: Patterns** Tests 1–7
Geometry	Describe how two-dimensional shapes make up the faces of three-dimensional objects.	1.G.1	99				
	Distinguish defining attributes of two- and three-dimensional shapes.	1.G.2	52, 62			**DT** Grade 1 Geometry 10	**Grade 1 Geometry: Shape** Tests 1, 2
	Use shapes to create a composite shape, and compose new shapes.	1.G.3	69			**DT** Grade 1 Geometry 9, 13	
	Partition circles and rectangles into two and four equal parts.	1.G.4	61, 66			**DT** Grade 1 Patterns and Fractions 5, 6, 13, 14	**Grade 1 Number and Algebra: Fractions and Money** Tests 1, 2
Measurement	Use direct comparison or a nonstandard unit to compare and order objects according to length.	1.M.1	84			**DT** Grade 1 Measurement 2, 4, 13, 14	**Grade 1 Measurement: Length** Tests 1–5
	Use direct comparison or a nonstandard unit to compare and order objects according to area.	1.M.1	59				
	Use direct comparison or a nonstandard unit to compare and order objects according to capacity.	1.M.1	89			**DT** Grade 1 Measurement 11, 17, 18, 19	**Grade 1 Measurement: Length** Tests 6–7
	Use direct comparison or a nonstandard unit to compare and order objects according to weight.	1.M.1	73				**Grade 1 Measurement: Length** Tests 8–9
	Tell and write time to the nearest half-hour using analog and digital clocks.	1.M.2	54, 70, 87			**DT** Grade 1 Measurement 1, 8, 9, 10, 15	**Grade 1 Measurement: Time** Tests 1–5
	Find the value of a collection of pennies, nickels, and dimes.	1.M.3	64, 83			**DT** Grade 1 Measurement 3, 5, 6, 7, 12	**Grade 1 Measurement: Money** Tests 1–4
Data Analysis	Organize and interpret data with up to three choices.	1.DA.1	80, 97			**DT** Grade 1 Data 1–4, 6, 9, 10, 12–16	**Grade 1 Statistics: Data** Tests 1–5

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GRADE 2

Domains	Standards	Codes	Mathseeds Lesson # — Knowledge and Skills: Online Lesson and Printable Resources	Assessment: End-of-lesson Quiz	Higher Order Thinking Skills: Critical Thinking and Problem Solving Worksheets	Additional Mathseeds Resources — Fluency: Driving Tests (DT) Mental Minute (MM)	Assessment: Printable Achievement Standards Assessment
Number Sense	Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number.	2.NS.1	101, 117			**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 whole numbers up to 1,000.	2.NS.2	106			**DT** Grade 2 Number 1, 5, 23, 24	**Grade 2 Number and Algebra: Numbers to 1000** Tests 1–4
	Determine whether a group of objects is odd or even.	2.NS.5	108			**DT** Grade 2 Operations 3	**Grade 2 Number and Algebra: Numbers to 1000** Test 6
	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.	2.NS.6	105, 129			**DT** Grade 2 Number 4, 8, 16, 18–22	**Grade 2 Number and Algebra: Numbers to 1000** Tests 5, 8
	Use place value understanding to compare two three-digit numbers, using >, =, and <.	2.NS.7	122			**DT** Grade 2 Number 14, 15	**Grade 2 Number and Algebra: Numbers to 1000** Test 7
Computation and Algebraic Thinking	Add and subtract fluently within 100.	2.CA.1	103, 110, 120, 124, 142, 144, 146, 150			**DT** Grade 2 Operations 1, 2, 4, 5, 7, 13–17, 20, 22, 23 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 2 Number and Algebra: Addition and Subtraction** Tests 1–4, 7
	Solve real-world problems involving addition and subtraction within 100.	2.CA.2	118, 131, 137, 139				**Grade 2 Number and Algebra: Addition and Subtraction** Test 9
	Solve real-world problems involving addition and subtraction within 100 in situations involving lengths.	2.CA.3	141			**DT** Grade 2 Measurement 19	**Grade 2 Measurement: Informal Units** Test 8
	Add and subtract within 1000.	2.CA.4	128, 134, 148			**DT** Grade 2 Operations 18, 24–28 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 2 Number and Algebra: Addition and Subtraction** Tests 5, 6, 8
	Use addition to find the total number of objects arranged in rectangular arrays; Write an equation.	2.CA.5	111, 113, 115, 130			**DT** Grade 2 Operations 8, 9, 10, 19 **MM** Multiplication Sprints	**Grade 2 Number and Algebra: Equal Groups** Tests 1–5
	Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.	2.CA.7	117, 133			**DT** Grade 2 Patterns and Fractions 1–4, 6–10, 13	**Grade 2 Number and Algebra: Number Patterns** Tests 1–6
Geometry	Identify, describe, and classify two- and three-dimensional shapes.	2.G.1	119, 121, 145			**DT** Grade 2 Geometry 3–7, 10	**Grade 2 Geometry: Shapes** Tests 1–5
	Partition a rectangle into rows and columns; Partition circles and rectangles into two, three, or four equal parts; describe the shares using the words halves, thirds, half of, a third.	2.G.4, 2.G.5	132			**DT** Grade 2 Patterns and Fractions 11, 12, 14, 16	**Grade 2 Number and Algebra: Fractions and Money** Tests 1–3
Measurement	Describe the relationship between centimeter and meter; Estimate and measure the length of an object.	2.M.1, 2.M.2	104, 126			**DT** Grade 2 Measurement 9, 11, 13, 15, 21, 22, 23, 24	**Grade 2 Measurement: Informal Units** Tests 3–7 **Grade 2 Measurement: Using Units** Tests 1–3
	Estimate and measure volume (capacity) using cups.	2.M.4	116			**DT** Grade 2 Measurement 8	**Grade 2 Measurement: Using Units** Test 4
	Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m.	2.M.5	114, 123, 127			**DT** Grade 2 Measurement 7, 20	**Grade 2 Measurement: Time** Tests 1–5
	Describe relationships of time.	2.M.6	109			**DT** Grade 2 Measurement 1–5, 14, 16	**Grade 2 Measurement: Time** Test 6
	Find the value of a collection of dollar bills, quarters, dimes, nickels, and pennies.	2.M.7	125, 147			**DT** Grade 2 Measurement 12	**Grade 2 Number and Algebra: Fractions and Money** Tests 4–7
Data Analysis	Draw a picture graph and a bar graph; Solve simple problems using information presented in the graphs.	2.DA.1	143			**DT** Grade 2 Data and Chance 1, 4, 5, 7–14	**Grade 2 Statistics: Data** Tests 1–5

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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 and Printable Resources	End-of-lesson Quiz	Critical Thinking and Problem Solving Worksheets	Mental Minute (MM)
Number Sense	Read and write whole numbers up to 10,000; Compare two whole numbers up to 10,000 using >, =, and < symbols.	3.NS.1, 3.NS.2	151, 156, 161			
	Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts.	3.NS.3	175			
	Represent fractions on a number line .	3.NS.4, 3.NS.5	160			
	Understand two fractions as equivalent; Recognize and generate simple equivalent fractions; Compare two fractions.	3.NS.6, 3.NS.7, 3.NS.8	180, 197			
	Use place value understanding to round whole numbers to the nearest 10 or 100.	3.NS.9	194			
Computation	Add and subtract whole numbers fluently within 1000.	3.C.1	163, 170, 173, 178			**MM** Addition Sprints **MM** Subtraction Sprints
	Represent the concept of multiplication of whole numbers with equal-sized groups, arrays, area models, and equal "jumps" on a number line.	3.C.2	155			
	Represent the concept of division of whole numbers with partitioning, sharing, and an inverse of multiplication.	3.C.3	165			
	Interpret whole-number quotients of whole numbers.	3.C.4	190			
	Multiply and divide within 100 using strategies, such as the relationship between multiplication and division, or properties of operations.	3.C.5	168, 171, 176, 193			
	Demonstrate fluency with multiplication facts and corresponding division facts of 0 to 10.	3.C.6	181, 199			**MM** Multiplication Sprints **MM** Division Sprints
Algebraic Thinking	Solve real-world problems involving the four operations.	3.AT.1, 3.AT.2	195			
	Solve two-step word problems using the four operations.	3.AT.3	183, 188			
	Represent verbal statements of equal groups as multiplication equations.	3.AT.4	158			
	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	3.AT.5	186, 196			
	Create, extend, and give an appropriate rule for number patterns using multiplication within 100.	3.AT.6	153, 166			
Geometry	Identify and describe three-dimensional shapes.	3.G.1	169			
	Understand that shapes may share attributes, and that the shared attributes can define a larger category (e.g., quadrilaterals).	3.G.2	182			
Measurement	Estimate and measure the mass of objects in grams (g) and kilograms (kg); Add, subtract, multiply, or divide to solve one-step real-world problems.	3.M.1	172			
	Estimate and measure the volume of objects in liters (l); Add, subtract, multiply, or divide to solve one-step real-world problems.	3.M.1	154			
	Tell and write time to the nearest minute from analog clocks, using a.m. and p.m., and measure time intervals in minutes.	3.M.3	162, 179, 185, 189			
	Find the value of any collection of coins and bills. Solve real-world problems.	3.M.4	159			
	Find the area of a rectangle with whole-number side lengths; Multiply side lengths to find areas of rectangles.	3.M.5, 3.M.6	157, 200			
	Find perimeters of polygons.	3.M.7	192			
Data Analysis	Create scaled picture graphs, scaled bar graphs, and frequency tables; Solve one- and two-step problems.	3.DA.1	174, 182			
	Generate measurement data by measuring lengths and display the data.	3.DA.2	187, 198			