Mathseeds Lessons and Arizona Mathematics Standards
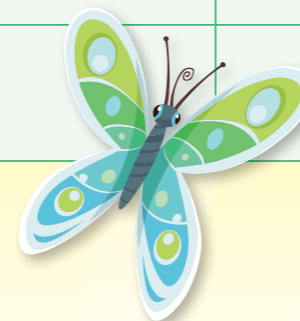
KINDERGARTEN

Domains	Standards	Codes	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	Count to 100; Count forward; Write numbers 0–20.	K.CC.A.1, K.CC.A.2, K.CC.A.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.B.4, K.CC.B.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.B.6, K.CC.B.7	22, 31, 41, 43, 45, 46, 50		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.A1, K.OA.A2, K.OA.A3, K.OA.A4, K.OA.A5	24, 30, 32, 34, 36, 40, 47, 49		30, 34, 36, 40, 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.A.1	41, 43, 45, 46, 50		41, 43	**DT** Early Operations 2, 6, 9	**Kindergarten Number** Test 4
Measurement and Data	Describe and compare measurable attributes.	K.MD.A.1, K.MD.A.2	13, 26, 29, 38			**DT** Early Measurement 2, 3, 5–12, 15, 16	**Kindergarten Measurement** Tests 1–5
	Classify objects and count the number of objects in each category.	K.MD.B.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.A.1				**DT** Early Geometry 9–11, 13–14	**Kindergarten Geometry** Test 5
	Correctly name and identify two-dimensional and three-dimensional shapes; Analyze and compare two-dimensional and three-dimensional shapes.	K.G.A.2 K.G.A.3 K.G.B.4	4, 6, 9, 15, 23, 27, 35, 37, 44		6, 15, 23, 27	**DT** Early Geometry 1–8, 19, 20	**Kindergarten Geometry** Test 3
	Use simple shapes to form composite shapes.	K.G.B.6				**DT** Early Geometry 12	**Kindergarten Geometry** Test 4

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GRADE 1

Domains	Standards	Codes	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	Use addition and subtraction within 20; Solve problems that call for addition of three whole numbers.	1.OA.A.1, 1.OA.A.2	51, 53, 58, 65, 68, 72, 85, 91		65, 68, 77, 83, 91, 93	**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.B.3, 1.OA.B.4	93, 100		93	**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.C.5, 1.OA.C.6	56, 58, 68, 72, 77, 85		56, 68, 77	**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.D.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.D.8	51, 53, 56, 58, 65, 68, 72, 85, 91, 93, 95, 96, 98, 100			**DT** Grade 1 Operations 8, 10, 11 **MM** Addition Sprints **MM** Subtraction Sprints	
Number and Operations in Base Ten	Count to 120.	1.NBT.A.1	60, 67, 75, 90		60, 67	**DT** Grade 1 Number 1–6, 8, 11–17, 21–24	
	Understand that the two digits of a two-digit number represent amounts of tens and ones.	1.NBT.B.2	88		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.B.3	56, 60, 81, 86		60, 80, 83	**DT** Grade 1 Number 7, 18	**Grade 1 Number and Algebra: Whole Numbers** Test 6
	Demonstrate understanding of addition within 100, connecting objects or drawings to strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Relate the strategy to a written form.	1.NBT.C.4	88, 95, 96, 98		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.C.5, 1.NBT.C.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.A.1, 1.MD.A.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.	1.MD.B.3a	54, 70, 87		87	**DT** Grade 1 Measurement 1, 8, 9, 10, 15	**Grade 1 Measurement: Time** Tests 1–5
	Identify coins by name and value.	1.MD.B.3b	64, 83			**DT** Grade 1 Measurement 3, 5, 6, 7, 12	**Grade 1 Number and Algebra: Fractions and Money** Tests 4–8
	Organize, represent, and interpret data.	1.MD.C.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.A.1, 1.G.A.2	52, 62, 69, 99		69	**DT** Grade 1 Geometry 9, 10, 13	**Grade 1 Geometry: Shape** Tests 1–7 **Grade 1 Number and Algebra: Fractions and Money** Tests 1, 2
	Partition circles and rectangles into two and four equal shares.	1.G.A.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 # Knowledge and Skills — Online Lesson, Printable Resources, & Problem Solving Tasks	Assessment End-of-lesson Quiz	Higher Order Thinking Skills Critical Thinking and Problem Solving Interactives	Additional Mathseeds Resources Fluency — Driving Tests (DT) Mental Minute (MM)	Assessment Printable Achievement Standards Assessment
Operations and Algebraic Thinking	Use addition and subtraction within 100 to solve one- and two-step word problems.	2.OA.A.1	103, 110, 111, 113, 118, 120, 124, 128, 131, 133, 134, 137, 139, 148, 150		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.B.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.C.3	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.C.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.A.1	101, 105		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 2s, 5s, 10s, and 100s.	2.NBT.A.2	101, 105, 106, 117, 129		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, and expanded form.	2.NBT.A.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 to record the results of comparisons.	2.NBT.A.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.A.5, 2.NBT.A.6	103, 110, 118, 120, 124, 133, 144, 146, 150		118, 124, 133, 139, 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
	Demonstrate understanding of addition and subtraction within 1000.	2.NBT.A.7	128, 129, 134, 144, 146		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.A.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.A	104, 126			**DT** Grade 2 Measurement 9, 11, 13, 15, 21–24	**Grade 2 Measurement: Informal Units** Tests 3–7
	Relate addition and subtraction to length.	2.MD.B	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. Know relationships of time.	2.MD.C.7	109, 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.C.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.D.9, 2.MD.D.10	143			**DT** Grade 2 Data and Chance 1, 4, 5, 7–14	**Grade 2 Statistics: Data** Tests 1–5
Geometry	Recognize and draw shapes having specified attributes; Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	2.G.A.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.A.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.A.1	155		153, 168, 176, 181, 186, 188, 196	**MM** Multiplication Sprints
	Interpret whole-number quotients of whole numbers.	3.OA.A.2	165, 181, 190			**MM** Division Sprints
	Use multiplication and division within 100 to solve word problems.	3.OA.A.3	168, 196		168, 196	
	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	3.OA.A.4	186		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.A.5, 3.OA.A.6	181, 190		181	**MM** Multiplication Sprints **MM** Division Sprints
	Fluently multiply and divide within 100.	3.OA.A.7	155, 158, 165, 171, 176, 196, 199		186, 188, 193, 199	**MM** Multiplication Sprints **MM** Division Sprints
	Solve two-step word problems using the four operations.	3.OA.A.8	183, 188, 195		183, 188, 195	
	Identify arithmetic patterns and explain them using properties of operations.	3.OA.A.9	153, 158, 166, 195			
Number and Operations in Base Ten	Use place value understanding to round whole numbers to the nearest 10 or 100.	3.NBT.A.1	194		194	
	Fluently add and subtract within 1000.	3.NBT.A.2	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.	3.NBT.A.3	193			**MM** Multiplication Sprints
Number and Operations-Fractions	Understand a fraction (1/b) as the quantity formed by one 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.	3.NF.A.1	175		175	
	Understand a fraction as a number on the number line; represent fractions on a number line diagram.	3.NF.A.2	160			
	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	3.NF.A.3	180, 197		180, 197	
Measurement and Data	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes	3.MD.A.1a	162, 179, 185, 189			
	Solve word problems involving money through $20.00, using symbols $, ".", ¢.	3.MD.A.1b	159			
	Measure and estimate liquid volumes and masses of objects using metric units. Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units.	3.MD.A.2	154, 172		154	
	Represent and interpret data.	3.MD.B.3, 3.MD.B.4	174, 182, 187, 198		182	
	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	3.MD.C.5, 3.MD.C.6, 3.MD.C.7	157, 200			
	Geometric measurement: recognize perimeter.	3.MD.C.8	192			
Geometry	Understand that shapes in different categories may share attributes, and that the shared attributes can define a larger category.	3.G.A.1	169			
	Partition shapes into parts with equal areas.	3.G.A.2	184			