Mathseeds Illinois Curriculum Chart

KINDERGARTEN
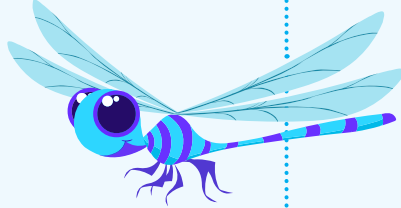
Domain	Standard	Standard Code	Mathseeds Lesson #		Higher Order Thinking Skills	Additional Resources	
			Knowledge and Skills Online Lesson, Printable Resources, and Problem Solving Tasks	**Assessment** End–of–lesson Quiz	**Higher Order Thinking Skills** Critical Thinking and Problem Solving Interactives	**Fluency** Driving Tests (DT) Mental Minute (MM)	**Assessment** Printable Achievement Standards Assessment
Number Sequence	Count to 100 by ones and by tens.	CC.K.CC.1	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 25, 28, 33, 41, 43, 45, 46, 48, 50, 56, 63		12, 41, 46, 63	**DT** Early Number 1–7, 9–19, 24, 25	**Kindergarten Number** Test 1, 2
	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	CC.K.CC.2					
	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).	CC.K.CC.3					
Object Quantity	Understand the relationship between numbers and quantities; connect counting to cardinality.	CC.K.CC.4					
	Count to answer "How many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	CC.K.CC.5					
Number Comparison	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.	CC.K.CC.6	22		38	**DT** Early Number 8, 20	**Kindergarten Number** Test 3
	Compare two numbers between 1 and 10 presented as written numerals.	CC.K.CC.7					
Addition and Subtraction	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations.	CC.K.OA.1	24, 30, 31, 32, 34, 36, 40, 47, 49, 58, 68		19, 30, 31, 34, 36, 40, 43, 47	**DT** Early Operations 1–20, 22–25 **MM** Addition Sprints **MM** Subtraction Sprints	**Kindergarten Operations** Test 1–4
	Solve addition and subtraction word problems, and add and subtract within 10, by using objects or drawings to represent the problem.	CC.K.OA.2					
	Decompose numbers less than or equal to 10 into pairs in more than one way, by using objects or drawings, and record each decomposition by a drawing or equation.	CC.K.OA.3					
	For any number from 1 to 9, find the number that makes 10 when added to the given number.	CC.K.OA.4					
	Fluently add and subtract within 5.	CC.K.OA.5					
Place Value	Compose and decompose numbers from 11 to 19 into ten ones and some further ones. Understand that these numbers are composed of ten ones.	CC.K.NBT.1	88		88		**Kindergarten Number** Test 4
Measurable attributes	Describe measurable attributes of objects, such as length. 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/less of" the attribute, and describe the difference.	CC.K.MD.1 CC.K.MD.2	26, 55			**DT** Early Measurement 5, 6, 9, 10	**Kindergarten Measurement** Test 1, 2 **Grade 1 Measurement: Length and Capacity** Test 1–5
	Describe measurable attributes of objects, such as weight. 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/less of" the attribute, and describe the difference.	CC.K.MD.1 CC.K.MD.2	29, 73, 135, 172		135, 172	**DT** Early Measurement 7, 8, 11, 12 **DT** Grade 2 Measurement 18, 19	**Kindergarten Measurement** Test 4 **Grade 2 Measurement: Informal Units** Test 6,7
	Describe measurable attributes of objects, such as capacity. 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/less of" the attribute, and describe the difference.	CC.K.MD.1 CC.K.MD.2	38, 89, 116, 154		154	**DT** Early Measurement 15, 16, 20 **DT** Grade 1 Measurement 11, 17–19 **DT** Grade 2 Measurement 8	**Kindergarten Measurement** Test 5 **Grade 1 Measurement: Length and Capacity** Test 6, 7 **Grade 2 Measurement: Informal Units** Test 4,5
Object Classification and Count	Classify objects into given categories; count the number of objects in each category and sort the categories by count.	CC.K.MD.3				**DT** Early Data 1–10	**Kindergarten Data** Test 1, 2
Two– and Three– dimensional shapes	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	CC.K.G.1	57, 78		57	**DT** Early Geometry 9 –11, 13–18	**Kindergarten Geometry** Test 5, 6 **Grade 1 Geometry: Shape** Test 7
	Correctly name shapes regardless of their orientations or overall size.	CC.K.G.2	4, 6, 9, 15, 23, 35, 44			**DT** Early Geometry 5, 6, 19–22	**Kindergarten Geometry** Test 1, 2
	Identify shapes as two–dimensional or three–dimensional.	CC.K.G.3					
	Analyze and compare two– and three– dimensional shapes, in different sizes and orientations.	CC.K.G.4				**DT** Early Geometry 1–4, 7	**Kindergarten Geometry** Test 3
	Model shapes in the world by building shapes from components and drawing shapes.	CC.K.G.5			6, 15, 23	**DT** Early Geometry 8, 23	
	Compose simple shapes to form larger shapes.	CC.K.G.6	69		69	**DT** Early Geometry 12	**Kindergarten Geometry** Test 4

Mathseeds Illinois Curriculum Chart

GRADE 1

Domain	Standard	Standard Codes	Mathseeds Lesson #			Additional Resources	
			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
			Online Lesson, Printable Resources, and Problem Solving Tasks	End–of–lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Numerical Sequence	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	CC.1.NBT.1	60, 67, 75, 81, 86		60, 67, 75, 81	**DT** Early Number 21–23 **DT** Grade 1 Number 1–6, 8–17, 19–24	**Grade 1 Number and Algebra: Whole Numbers** Test 1–6
Place Value	Understand that the two digits of a two–digit number represent amounts of tens and ones.	CC.1.NBT.2					
	Compare two two–digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	CC.1.NBT.3				**DT** Grade 1 Number 7, 18	**Grade 1 Number and Algebra: Whole Numbers** Test 7 **Grade 1 Number and Algebra: Place Value** Test 6
Properties of Operations	Apply properties of operations as strategies to add and subtract.	CC.1.OA.3	93		93	**DT** Grade 1 Operations 16	**Grade 1 Number and Algebra: Operations** Test 5
	Understand subtraction as an unknown–addend. problem.	CC.1.OA.4					
Addition and Subtraction	Relate counting to addition and subtraction.	CC.1.OA.5	77, 79, 90			**DT** Grade 1 Patterns and Fractions 7–10	**Grade 1 Number and Algebra: Whole Numbers** Test 8, 9 **Grade 1 Number and Algebra: Patterns** Test 1–7
	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.	CC.1.OA.7	76		76	**DT** Grade 1 Number 18	
	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	CC.1.OA.8	100				
	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	CC1.OA.2	51, 91		51, 91, 118		
	Use addition and subtraction within 20 to solve word problems. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.	CC.1.NBT.4 CC.1.OA.1 CC.1.OA.6	53, 65, 68, 72, 76, 85, 96		53, 56, 65, 68, 72, 85, 96	**DT** Grade 1 Operations 1–12 **MM** Addition Sprints **MM** Subtraction Sprints	**Grade 1 Number and Algebra: Operations** Test 1–4
	Given a two–digit number, mentally find 10 more or 10 less than the number, without having to count.	CC.1.NBT.5					
	Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90.	CC.1.NBT.6	98				
Measurement	Order three objects by length; compare the lengths of two objects indirectly by using a third object.	CC.1.MD.1				**DT** Grade 1 Measurement 2, 4, 13, 14	
	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 graphs or overlaps.	CC.1.MD.2	84				
Time	Tell and write time in hours and half–hours using analog and digital clocks.	CC.1.MD.3	39, 54, 70, 87		87	**DT** Early Measurement 17 **DT** Grade 1 Measurement 1, 8–10, 15, 16	**Grade 1 Measurement: Time** Test 1–6
Represent and Interpret Data	Organize, represent, and interpret data with up to three categories.	CC.1.MD.4	80, 97		80	**DT** Grade 1 Data 1–3, 9, 10, 12–16	**Grade 1 Data** Test 1–5
Two– and Three–dimensional	Distinguish between defining attributes versus non–defining attributes for a variety of shapes.	CC.1.G.1	52, 62, 99, 121, 169, 184		52, 121		**Grade 1 Geometry: Shape** Test 1–6
	Compose two–dimensional shapes or three–dimensional shapes to create a composite shape, and compose new shapes from the composite shape.	CC.1.G.2					
Fraction	Partition circles and rectangles into two and four equal shares. Understand that decomposing into more equal shares creates smaller shares.	CC.1.G.3	61, 66			**DT** Grade 1 Patterns and Fractions 3, 5, 6, 11, 13, 14	**Grade 1 Number and Algebra: Fractions and Money** Test 1–3

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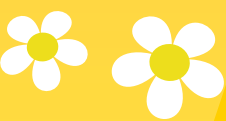
GRADE 2

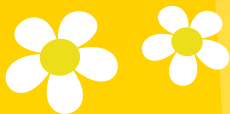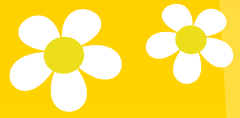| | | | Mathseeds Lesson # | | | Additional Resources | |
| | | | Knowledge and Skills | Assessment | Higher Order Thinking Skills | Fluency | Assessment |
Domain	Standard	Standard Code	Online Lesson, Printable Resources, and Problem Solving Tasks	End–of–lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Place Value	Understand that the three digits of a three–digit number represent amounts of hundreds, tens and ones.	CC.2.NBT.1	105		105, 106, 108	**DT** Grade 2 Number 21, 22	**Grade 2 Number and Algebra: Numbers to 1000** Test 5, 6
	Count within 1000; skip–count by 5s, 10s, and 100s.	CC.2.NBT.2	101, 106, 117		117	**DT** Grade 2 Number 1–6, 9–13, 16, 17 **DT** Grade 2 Patterns and Fractions 1–4, 8–10, 13	
	Read and write numbers to 1000 using base–ten numerals, number names, and expanded form.	CC.2.NBT.3	101, 106			**DT** Grade 2 Number 8, 18–20, 23, 24	**Grade 2 Number and Algebra: Numbers to 1000** Test 1, 3, 7
	Compare two three–digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	CC.2.NBT.4	122			**DT** Grade 2 Number 14, 15	**Grade 2 Number and Algebra: Numbers to 1000** Test 6
Addition and Subtraction	Use addition and subtraction within 100 to solve one– and two–step word problems. Fluently add and subtract within 100 using strategies based on place values, properties of operations, and/or the relationship between addition and subtraction.	CC.2.OA.1 CC.2.NBT.5	103, 110, 118, 120, 124, 131, 139		110, 124, 128, 134, 139	**DT** Grade 2 Operations 1, 4, 7, 13–17, 22	
	Fluently add and subtract within 20 using mental strategies.	CC.2.OA.2	142		142	**MM** Addition Sprints **MM** Subtraction Sprints	**Grade 2 Number and Algebra: Addition and Subtraction** Test 1,2
	Add up to four two digit numbers using strategies based on place value and properties of operations.	CC.2.NBT.6	150		120, 150	**DT** Grade 2 Operations 23	**Grade 2 Number and Algebra: Addition and Subtraction** Test 5, 8
	Add and subtract within 1000.	CC.2.NBT.7	128, 134, 144, 146, 148		128, 134, 144, 146, 148	**DT** Grade 2 Operations 18, 21, 24–25,27, 28	**Grade 2 Number and Algebra: Addition and Subtraction** Test 6, 7
	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	CC.2.NBT.8					
	Explain why addition and subtraction strategies work, using place value and the properties of operations.	CC.2.NBT.9					**Grade 2 Number and Algebra: Addition and Subtraction** Test 3
Equal Groups of Objects	Determine whether a group of objects (up to 20) has an odd or even number of members.	CC.2.OA.3	108			**DT** Grade 2 Operations 3	
	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns.	CC.2.OA.4	111, 113, 130		77, 79, 113, 130	**DT** Grade 2 Operations 10, 19	
Measurement	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	CC.2.MD.1	104, 126, 182		104, 182	**DT** Grade 2 Measurement 6, 13–15, 21, 22	**Grade 2 Measurement: Informal Units** Test 1–2
	Measure the length of an object twice, using length units of different lengths for the two measurements.	CC.2.MD.2					
	Estimate lengths using units of inches, feet, centimeters, and meters.	CC.2.MD.3					
	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	CC.2.MD.4					
	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units.	CC.2.MD.5	141		141		
	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points and represent whole–number sums and differences within 100 on a number line diagram.	CC.2.MD.6	25, 28, 40, 56, 58, 85				**Grade 2 Measurement: Informal Units** Test 8
Time and Money	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	CC.2.MD.7	114, 123, 127			**DT** Grade 2 Measurement 7, 10, 20	**Grade 2 Measurement: Time** Test 1–3
	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ (dollars) and ¢ (cents) symbols appropriately.	CC.2.MD.8	64, 83, 92, 125, 147, 159		159	**DT** Grade 2 Measurement 11, 12, 23, 24	**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 to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole–number units.	CC.2.MD.9	143		143	**DT** Grade 2 Data and Chance 1, 4–5, 7–14	**Grade 2 Statistics: Data** Test 1–7
	Draw a picture graph and 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.	CC.2.MD.10					
Shape Attributes	Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	CC.2.G.1	119, 145, 177		119, 140, 145	**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.	CC.2.G.2	59, 112		59		**Grade 2 Measurement: Informal Units** Test 3
Fractions	Partition circles and rectangles into two, three, or four equal shares. Recognize that equal shares of identical wholes need not have the same shape.	CC.2.G.3	132, 138		132	**DT** Grade 2 Patterns and Fractions 5, 11, 12, 14–17	**Grade 2 Number and Algebra: Fractions and Money** Test 1–4

Mathseeds Illinois Curriculum Chart

GRADE 3

| | | | Mathseeds Lesson # | | | Additional Resources |
| | | | Knowledge and Skills | Assessment | Higher Order Thinking Skills | Fluency |
Domain	Standard	Standard Code	Online Lesson, Printable Resources, and Problem Solving Tasks	End–of–lesson Quiz	Critical Thinking and Problem Solving Interactives	Mental Minute (MM)
Multiplication and Division	Intrepret products of whole numbers	CC.3.OA.1	155, 158, 165, 168, 171, 176, 186		168, 176, 186	
	Interpret whole–number quotients of whole numbers.	CC.3.OA.2				
	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities.	CC.3.OA.3				
	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	CC.3.OA.4	181, 188, 190, 196		181, 188, 196	
	Apply properties of operations as strategies to multiply and divide.	CC.3.OA.5				
	Understand division as an unknown–factor problem.	CC.3.OA.6				
	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division.	CC.3.OA.7	199		199	**MM** Multiplication Sprints **MM** Division Sprints
Four Operations and Patterns	Solve two–step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity.	CC.3.OA.8	163, 195		195	
	Identify arithmetic patterns and explain them using properties of operations.	CC.3.OA.9	153		153	
Place Value	Use place value understanding to round whole numbers to the nearest 10 or 100.	CC.3.NBT.1	129, 194		194	
	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations and/or the relationship between addition and subtraction	CC.3.NBT.2	166, 170, 173, 178, 183		156, 163, 170, 173, 178, 183	**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.	CC.3.NBT.3	193		193	
Fractions	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.	CC.3.NF.1	160, 175, 180, 191, 197		180, 191, 197	
	Understand a fraction as a number on the number line; represent fractions on a number line diagram.	CC.3.NF.2				
	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	CC.3.NF.3				
Measurement	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.	CC.3.MD.1	162, 179, 185, 189		179, 185, 189	
	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).	CC.3.MD.2	154, 172		154, 172	
	Recognize area as an attribute of plane figures and understand concepts of area measurement.	CC.3.MD.5	157, 200		200	
	Measure areas by counting unit squares.	CC.3.MD.6				
	Understand concepts of area and relate area to multiplication and to addition.	CC.3.MD.7				
	Recognize perimeter as an attribute of place figures and distinguish between linear and area measures. Solve real world and mathematical problems involving perimeters of polygons.	CC.3.MD.8	192			
Shapes and Attributes	Understand that shapes in different categories may share attributes and 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.	CC.3.G.1	169, 177, 184			
	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	CC.3.G.2	160, 180			
Data Displays	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.	CC.3.MD.3	174, 187		187	
	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units.	CC.3.MD.4	198			