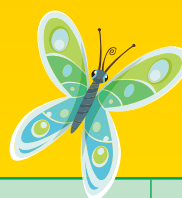




Mathseeds Lessons and Omaha Public Schools Mathematics Standards



KINDERGARTEN



				Mathseeds Lesson			Additional Mathseeds Resources	
Categories	Sub-categories	Curricular Indicators	Codes	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
NUMBER	MA.0.1.1 Numeric Relationships	Perform the counting sequence by counting forward from any given number to 100, by ones. Count by tens to 100 starting at any decade number. Write numbers 0 to 20 and represent a number of objects with a written numeral 0 to 20.	MA 0.1.1.a, MA 0.1.1.f	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 25, 28, 31, 33, 41, 43, 45, 46, 48, 50		19	DT Early Number 2, 4, 5, 9, 10, 13, 16, 17, 21, 23	Kindergarten Number Test 1
		Demonstrate cardinality. Use one-to-one correspondence when counting objects 0 to 20. Demonstrate the relationship between whole numbers, knowing each sequential number name refers to a quantity that is one larger. Count up to 20 objects.	MA 0.1.1.b, MA 0.1.1.c, MA 0.1.1.d, MA 0.1.1.e	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 20, 25, 28, 31, 41, 43, 45, 46, 50		12, 19, 41, 43	DT Early Number 1, 3, 7, 14, 15, 18, 22	Kindergarten Number Test 2
		Compose and decompose numbers from 11 to 19 into ten ones and some more ones by a drawing, model, or equation.	MA 0.1.1.g	41, 43, 45, 46, 50		41, 43	DT Early Number 11, 12	Kindergarten Number Test 4
		Compare the number of objects in two groups as greater than, less than, or equal to by using strategies of matching and counting.	MA 0.1.1.h, MA 0.1.1.i	22, 31, 41, 43, 45, 46, 50		41	DT Early Number 6, 9, 19, 20	Kindergarten Number Test 3
	MA.0.1.2 Operations	Compare the value of two written numerals between 1 and 10.	MA 0.1.2.a	24, 30, 32, 40, 47, 49		12, 30	DT Early Operations 1-5, 13, 16, 18, 22, 25 MM Addition Sprints MM Subtraction Sprints	Kindergarten Operations Tests 1, 2
ALGEBRA	MA.0.2.1 Algebraic Relationships	Decompose numbers less than or equal to 10 into pairs in more than one way. For any number from 1 to 9, find the number that makes 10 when added to the given number, showing the answer with a model, drawing, or equation.	MA 0.2.1.a, MA 0.2.1.b	34, 36		30, 34, 36	DT Early Operations 6, 7, 9-12, 14, 17, 19, 23, 25 MM Addition Sprints MM Subtraction Sprints	Kindergarten Operations Test 3
	MA.0.2.3 Applications	Solve real-world problems that involve addition and subtraction within 10.	MA 0.2.3.a	24, 30, 32, 34, 36, 40, 47, 49		12, 19, 30, 34, 36, 40, 41, 43, 47		Kindergarten Operations Test 4
GEOMETRY	MA.0.3.1 Characteristics	Describe real-world objects using names of shapes (e.g., squares, circles, triangles, rectangles, hexagons). Compare and analyze two-dimensional shapes.	MA 0.3.1.a, MA 0.3.1.c	4, 6, 9, 15, 23, 27, 37		6, 15, 23	DT Early Geometry 1-8	Kindergarten Geometry Test 1
		Describe real-world objects using names of shapes (e.g., cubes, cones, spheres, and cylinders). Compare and analyze three-dimensional shapes.	MA 0.3.1.a, MA 0.3.1.c	35, 44			DT Early Geometry 15-18, 21-23	Kindergarten Geometry Test 2
		Identify shapes as two-dimensional ("flat") or three-dimensional ("solid").	MA 0.3.1.b	35, 44			DT Early Geometry 19, 20	Kindergarten Geometry Test 3
		Combine simple shapes to compose larger shapes.	MA 0.3.1.e	9, 23			DT Early Geometry 12	Kindergarten Geometry Test 4
	MA.0.3.2 Coordinate Geometry	Describe the relative positions of objects (e.g., above, below, beside, in front of, behind, next to, between).	MA 0.3.2.a	55, 57			DT Early Geometry 9, 10, 11, 13, 14	Kindergarten Geometry Test 5
	MA.0.3.3 Measurement	Describe measurable attributes of real-world objects (e.g., length). Compare length of two objects (e.g., longer/shorter).	MA 0.3.3.a, MA 0.3.3.b	13, 26			DT Early Measurement 2, 3, 5, 6, 9, 10	Kindergarten Measurement Tests 1, 2
		Describe measurable attributes of real-world objects (e.g., weight). Compare weight of two objects (e.g., heavier/lighter).	MA 0.3.3.a, MA 0.3.3.b	29			DT Early Measurement 7, 8, 12	Kindergarten Measurement Test 4
DATA	MA.0.4.2 Analysis & Applications	Identify, sort, and classify objects by size, shape, color, and other attributes. Identify objects that do not belong to a particular group and explain the reasoning used.	MA 0.4.2.a	8, 23		6, 8, 15, 23, 27	DT Early Data 1-10	Kindergarten Data Test 1



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GRADE 1



				Mathseeds Lesson			Additional Mathseeds Resources	
Categories	Sub-categories	Curricular Indicators	Codes	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
NUMBER	MA.1.1.1 Numeric Relationships	Count to 120 by ones and tens, starting at any given number. Read and write numerals within the range of 0–120. Write numerals to match a representation of a given set of objects for numbers up to 120.	MA 1.1.1.a, MA 1.1.1.b, MA 1.1.1.c	56, 60, 63, 67, 75, 77, 81, 86, 90		60, 63, 79, 80, 88	DT Grade 1 Number 1–4, 6, 8, 11–16, 21–23	Grade 1 Number and Algebra: Whole Numbers Tests 1–9
		Demonstrate that each digit of a two–digit number represents amounts of tens and ones, and can be recorded as an equation.	MA 1.1.1.d, MA 1.1.1.e	60, 67, 75, 88		67, 88	DT Grade 1 Number 5, 9, 10, 17, 19, 24	Grade 1 Number and Algebra: Place Value Tests 1–4
		Compare two two–digit numbers by using symbols $<$, $=$, and $>$.	MA 1.1.1.f	60, 81, 86		60, 80, 83	DT Grade 1 Number 7, 18, 20	Grade 1 Number and Algebra: Place Value Tests 5, 6
	MA 1.1.2 Operations	Fluently add and subtract within 10.	MA 1.1.2.a	51, 53		68, 91	DT Grade 1 Operations 1, 3 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Operations Test 1
		Add and subtract within 20, using a variety of strategies.	MA 1.1.2.b	58, 65, 68, 72, 85, 91		65, 68, 77, 83, 91, 93	DT Grade 1 Operations 4, 5, 7, 9 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Operations Tests 2, 3
		Find the difference between two numbers that are multiples of 10, ranging from 10–90. Mentally find 10 more or 10 less than a two–digit number without having to count. Add within 100, which may include adding a two–digit number and a one–digit number, and adding a two–digit number and a multiple of ten.	MA 1.1.2.c, MA 1.1.2.d, MA 1.1.2.e	79, 88, 95, 96, 98		96	DT Grade 1 Operations 15, 17, 19, 20 MM Addition Sprints MM Subtraction Sprints	Grade 1 Number and Algebra: Operations Test 6
ALGEBRA	MA 1.2.1 Algebraic Relationships	Use the meaning of the equal sign to determine if equations are true and give examples of equations that are true.	MA 1.2.1.a	76			DT Grade 1 Operations, 10, 11	
		Use the relationship of addition and subtraction to solve subtraction problems. Find numerical patterns to make connections between counting and addition and subtraction.	MA 1.2.1.b, MA 1.2.1.c	93		68, 93	DT Grade 1 Operations 16	
		Determine the unknown whole number in an addition or subtraction equation.	MA 1.2.1.d	51, 53, 56, 58, 65, 68, 72, 85, 91, 93, 95, 96, 98, 100			DT Grade 1 Operations 8, 12	
	MA 1.2.2 Algebraic Processes	Decompose numbers and use the commutative and associative properties of addition to develop addition and subtraction strategies including basic facts within 20.	MA 1.2.2.a	88		91, 96	DT Grade 1 Operations 6, 18	Grade 1 Number and Algebra: Place Value Tests 5, 6 Grade 1 Number and Algebra: Operations Test 5
	MA 1.2.3 Applications	Solve real–world problems involving addition and subtraction within 20. Solve real–world problems that include addition of three whole numbers whose sum is less than or equal to 20.	MA 1.2.3.a, MA 1.2.3.b	51, 53, 56, 58, 65, 68, 72, 85, 91, 95, 96, 98, 100		51, 53, 56, 65, 68, 77, 83, 91, 93, 96	DT Grade 1 Operations 2	Grade 1 Number and Algebra: Operations Tests 4
GEOMETRY	MA 1.3.1 Characteristics	Determine defining and non–defining attributes of two–dimensional shapes.	MA 1.3.1.a	52, 62, 99			DT Grade 1 Geometry 1–3, 6–8, 10, 17–19	Grade 1 Geometry: Shape Tests 1–6
		Decompose circles and rectangles into two and four equal parts, using the terms “halves”, “fourths” and “quarters”, and use the phrases “half of”, “fourths of”, and “quarter of”.	MA 1.3.1.b	61, 66			DT Grade 1 Patterns & Fractions 3, 5, 6, 11, 13, 14	Grade 1 Number and Algebra: Fractions & Money Tests 1, 2
		Use two–dimensional shapes and three–dimensional shapes to compose and describe new shapes.	MA 1.3.1.c	62, 69		59, 69	DT Grade 1 Geometry 9, 13	Grade 1 Geometry: Shape Test 7
	MA 1.3.3 Measurement	Identify, name, and understand the value of dimes and pennies relating to tens and ones, and solve real–world problems, using ¢ symbol appropriately.	MA 1.3.3.a	64, 83, 92			DT Grade 1 Measurement 3, 5–7, 12	Grade 1 Number and Algebra: Fractions & Money Tests 3–7
		Tell and write time to the half hour and hour using analog and digital clocks.	MA 1.3.3.b	54, 70, 87		87	DT Grade 1 Measurement 1, 8–10, 15, 16	Grade 1 Measurement: Time Tests 1–5
		Measure objects by using a shorter object end–to–end and know that the length of the object is the amount of same–size objects that span it lined up end–to–end. Order three objects by directly comparing their lengths, or indirectly by using a third object.	MA 1.3.3.c, MA 1.3.3.d	84			DT Grade 1 Measurement 2, 4, 13, 14	Grade 1 Measurement: Length Tests 1–5
DATA	MA 1.4.1 Representations	Organize and represent a data set with up to three categories using a picture graph.	MA 1.4.1.a	80		80		Grade 1 Statistics: Data Tests 4
	MA 1.4.2 Analysis & Applications	Ask and answer questions about the total number of data points, how many in each category, and compare categories by identifying how many more or less are in a particular category using a picture graph.	MA 1.4.2.a	97		80	DT Grade 1 Data 1–3, 6, 9, 10, 12, 13, 14, 15	Grade 1 Statistics: Data Tests 2, 3



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GRADE 2



Categories	Sub-categories	Curricular Indicators	Codes	Mathseeds Lesson			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
NUMBER	MA.2.1.1 Numeric Relationships	Count within 1000, including skip-counting by 5s, 10s, and 100s starting at a variety of multiples of 5, 10 or 100. Read and write numbers within the range of 0–1000 using standard, word, and expanded forms.	MA 2.1.1.a, MA 2.1.1.b	101, 105, 106, 117, 129		105, 112, 132, 133	DT Grade 2 Number 2, 6, 8–10, 12, 13, 17–20, 23, 24 DT Grade 2 Patterns & Fractions 1–4, 7–10, 13	Grade 2 Number and Algebra: Numbers to 1000 Tests 1, 3, 4, 8 Grade 2 Number and Algebra: Number Patterns Tests 1–7
		Demonstrate that each digit of a three-digit number represents amounts of hundreds, tens and ones. Demonstrate that 100 represents a group of ten tens.	MA 2.1.1.c, MA 2.1.1.d	101, 105		105	DT Grade 2 Number 1, 4, 5, 7, 11, 16, 21, 22	Grade 2 Number and Algebra: Numbers to 1000 Tests 2, 5
		Compare two three-digit numbers by using symbols $<$, $=$, and $>$ and justify the comparison based on the meanings of the hundreds, tens, and ones.	MA 2.1.1.e	122			DT Grade 2 Number 14, 15	Grade 2 Number and Algebra: Numbers to 1000 Test 7
	MA 2.1.2 Operations	Fluently add and subtract within 20.	MA 2.1.2.a	142			DT Grade 2 Operations 1–5 MM Addition Sprints MM Subtraction Sprints	Grade 2 Number and Algebra: Addition and Subtraction Test 1
		Add and subtract within 100 using strategies including the standard algorithm. Add up to three two-digit numbers.	MA 2.1.2.b, MA 2.1.2.d	103, 110, 118, 120, 124, 128, 150		118, 124, 125, 128, 139, 150	DT Grade 2 Operations 7, 13–17, 20, 22, 23 MM Addition Sprints MM Subtraction Sprints	Grade 2 Number and Algebra: Addition and Subtraction Tests 2, 3, 5, 6
		Mentally add or subtract 10 or 100 to/from a given number 100–900. Add and subtract within 1000.	MA 2.1.2.c, MA 2.1.2.e	128, 134, 144, 146, 148		134, 144, 146	DT Grade 2 Operations 18, 21, 24–28 MM Addition Sprints MM Subtraction Sprints	Grade 2 Number and Algebra: Addition and Subtraction Tests 7, 8
		Use addition to find the total number of objects arranged in an array no larger than five rows and five columns and write an equation to express the total (e.g., $3 + 3 + 3 = 9$).	MA 2.1.2.f	111, 113, 115, 130		113, 130, 136	DT Grade 2 Operations 6, 8–12, 19	Grade 2 Number and Algebra: Equal Groups Tests 1–5
ALGEBRA	MA 2.2.1 Algebraic Relationships	Identify a group of objects from 0–20 as even or odd by counting by 2's or by showing even numbers as a sum of two equal parts.	MA 2.2.1.a	108		108	DT Grade 2 Number 3	Grade 2 Number and Algebra: Numbers to 1000 Test 6
	MA 2.2.3 Applications	Solve real-world problems involving addition and subtraction within 100.	MA 2.2.3.a	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 Tests 4, 9
GEOMETRY	MA 2.3.1 Characteristics	Recognize and draw shapes having a specific number of angles, faces, or other attributes, including triangles, quadrilaterals, pentagons, and hexagons.	MA 2.3.1.a	119, 121, 145		102, 119, 121, 140	DT Grade 2 Geometry 3–7, 10	Grade 2 Geometry: Shape Tests 1–5
		Partition a rectangle into rows and columns of equal sized squares. Count to find the total. Divide circles and rectangles into two, three, or four equal parts. Describe the parts using the language of halves, thirds, fourths, half of, a third of, a fourth of. Recognize that equal shares of identical wholes need not have the same shape.	MA 2.3.1.b, MA 2.3.1.c, MA 2.3.1.d	132			DT Grade 2 Patterns & Fractions 5, 11, 12, 14–17	Grade 2 Number and Algebra: Fractions and Money Tests 1–3
	MA 2.3.3 Measurement	Solve real-world problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.	MA 2.3.3.a	125, 147		125, 147	DT Grade 2 Measurement 12	Grade 2 Number and Algebra: Fractions and Money Tests 4–7
		Identify and write time to five-minute intervals using analog and digital clocks and both a.m. and p.m.	MA 2.3.3.b	109, 114, 123, 127			DT Grade 2 Measurement 1–5, 7, 10, 14, 16, 20	Grade 2 Measurement: Time Tests 1–4, 6
		Identify and use appropriate tools for measuring length. Measure the length of an object using two different length units and describe how the measurements relate to the size of the specific unit. Measure and estimate lengths using inches, feet, centimeters, and meters. Compare the difference in length of objects using inches and feet or centimeters and meters.	MA 2.3.3.c, MA 2.3.3.d, MA 2.3.3.e, MA 2.3.3.f	104, 126, 143			DT Grade 2 Measurement 6, 9, 11, 13, 15, 21–24	Grade 2 Measurement: Length Tests 1–6
		Represent whole numbers as lengths from 0 on a number line diagram and represent whole number sums and differences within 100 on a number line.	MA 2.3.3.g	126				Grade 2 Measurement: Length Test 7
		Use measurement lengths and addition and subtraction within 100 to solve real-world problems	MA 2.3.3.h	141			DT Grade 2 Measurement 19	Grade 2 Measurement: Length Test 8
DATA	MA 2.4.1 Representations	Create and represent a data set using pictographs and bar graphs to represent a data set with up to four categories.	MA 2.4.1.a	143				Grade 2 Statistics: Data Tests 2, 5
	MA 2.4.2 Analysis & Applications	Interpret data using bar graphs with up to four categories. Solve simple comparison problems using information from the graphs.	MA 2.4.2.a	143			DT Grade 2 Data & Chance 1, 4, 5, 7–14	Grade 2 Statistics: Data Tests 1, 3, 4, 5



Mathseeds Lessons and Omaha Public Schools Mathematics Standards



GRADE 3



Categories	Sub-categories	Curricular Indicators	Codes	Mathseeds Lesson			Additional Mathseeds Resources
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency
NUMBER	MA.3.1.1 Numeric Relationships	Read, write and demonstrate multiple equivalent representations for numbers up to 100,000 using objects, visual representations, including standard form, word form, expanded form, and expanded notation. Compare whole numbers through the hundred thousands and represent the comparisons using the symbols $>$, $<$ or $=$.	MA 3.1.1.a , MA 3.1.1.b	151, 156, 161		153, 161, 194, 199	
		Round a whole number to the tens or hundreds place, using place value understanding or a visual representation.	MA 3.1.1.c	194			
		Represent and understand a fraction as a number on a number line. Show and identify equivalent fractions using visual representations including pictures, manipulatives, and number lines.	MA 3.1.1.d , MA 3.1.1.f	160, 175, 180, 191, 197			
		Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	MA 3.1.1.e	197			
		Find parts of a whole and parts of a set using visual representations. Compare and order fractions having the same numerators or denominators using visual representations, comparison symbols, and verbal reasoning.	MA 3.1.1.g, MA 3.1.1.i	160, 175, 191, 197		175, 180, 191, 197	
		Explain and demonstrate how fractions $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and a whole relate to time, measurement, and money, and demonstrate using visual representation.	MA 3.1.1.h	191			
	MA 3.1.2 Operations	Add and subtract within 1000 with or without regrouping.	MA 3.1.2.a	153, 163, 170, 178		170, 172, 178, 183, 188, 195	MM Addition Sprints MM Subtraction Sprints
		Select and apply the appropriate methods of computation when solving one- and two- step addition and subtraction problems with four-digit whole numbers through the thousands. Determine the reasonableness of whole number sums and differences in real-world problems using estimation, compatible numbers, mental computations, or other strategies.	MA 3.1.2.b, MA 3.1.2.h	163, 173		170, 178, 183, 195	
		Use drawings, words, arrays, symbols, repeated addition, equal groups, and number lines to explain the meaning of multiplication.	MA 3.1.2.c	155		153, 168, 176, 181, 186, 188, 196	
		Multiply one digit whole numbers by multiples of 10 in the range of 10 to 90.	MA 3.1.2.e	193			
		Use objects, drawings, arrays, words and symbols to explain the relationship between multiplication and division.	MA 3.1.2.f	165, 181			
		Fluently multiply and divide within 100.	MA 3.1.2.g	155, 158, 165, 171, 176, 196, 199		186, 188, 193, 199	MM Multiplication Sprints MM Division Sprints
ALGEBRA	MA 3.2.1 Algebraic Relationships	Identify arithmetic patterns (including patterns in the addition or multiplication tables) using properties of operations.	MA 3.2.1.a	153, 158, 166, 195			
		Interpret a multiplication equation as equal groups. Represent verbal statements of equal groups as multiplication equations.	MA 3.2.1.b	155, 158			
	MA 3.2.3 Applications	Apply the commutative, associative, and distributive properties as strategies to multiply and divide.	MA 3.2.2.a	171, 176, 186			
		Solve one-step whole number equations involving addition, subtraction, multiplication, or division, including the use of a letter to represent the unknown quantity.	MA 3.2.2.b	155, 165, 168, 170, 173, 178, 183, 186, 188, 190, 193, 195, 196		154, 188, 193, 194, 196, 199	
	MA 1.2.3 Applications	Solve real-world problems involving two-step equations (involving two operations) involving whole numbers using addition and subtraction. Write an equation (e.g., one operation, one variable) to represent real-world problems involving whole numbers.	MA 3.2.3.a, MA 3.2.3.b	183		159, 163, 170, 182, 188, 193, 196	
GEOMETRY	MA 3.3.1 Characteristics	Identify the number of sides, angles, and vertices of two-dimensional shapes. Sort quadrilaterals into categories (e.g., rhombuses, squares, and rectangles).	MA 3.3.1.a, MA 3.3.1.b	169, 184			
	MA 3.3.3 Measurement	Find the perimeter of polygons given the side lengths, and find an unknown side length.	MA 3.3.3.a	192			
		Tell and write time to the minute using both analog and digital clocks.	MA 3.3.3.b	162, 185			
		Solve real-world problems involving addition and subtraction of time intervals and find elapsed time.	MA 3.3.3.c	179, 189			
		Identify and use the appropriate tools and units of measurement, both customary and metric, to solve real-world problems involving length, weight, mass, liquid volume, and capacity (within the same system and unit).	MA 3.3.3.d	154, 172		154, 172	
		Estimate and measure length to the nearest half inch, quarter inch, and centimeter.	MA 3.3.3.e	182, 198			
		Use concrete and pictorial models to measure areas in square units by counting square units. Find the area of a rectangle with whole-number side lengths by modeling with unit squares, and show that the area is the same as would be found by multiplying the side lengths. Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters.	MA 3.3.3.f , MA 3.3.3.g MA 3.3.3.h	157, 200			
DATA	MA 3.4.1 Representations	Create scaled pictographs and scaled bar graphs to represent a data set—including data collected through observations, surveys, and experiments—with several categories.	MA 3.4.1.a	174, 187			
		Represent data using line plots where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	MA 3.4.1.b	192			
	MA 3.4.2 Analysis & Applications	Solve problems and make simple statements about quantity differences (e.g., how many more and how many less) using information represented in pictographs and bar graphs.	MA 3.4.2.a	174, 187			

