KINDERGARTEN Mathseeds Lesson # **Knowledge and Skills Higher Order Thinking Skills** Assessment **Online Lesson, Printable Resources,** End-of-lesson **Critical Thinking and Problem** Strand Content Code & Problem Solving Tasks Quiz **Solving Interactives** Recognize and label arrangements for collections up to 10; Use one-to-one correspondence K.N.1.a when counting objects to show the relationship between numbers and quantities and K.N.2.a understand the last number counted is a direct representation of the total objects in a given 1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 25, 33, 41, 43, K.N.2.c 12, 41, 46 set; Count out the number of objects given a number from 1 to 20 in structured arrangements 45, 46, 48, 50 K.N.2.d and count up to 10 objects in a scattered configuration; Write, represent and name a number K.N.2.g of objects 0 to 20. Count forward and backward from any given number within 20; Count in sequential order by K.N.2.e 21, 25, 28, 50 Number ones and by tens to 100, making accurate decade transitions. K.N.2.f Understand that each successive number name refers to a quantity that is one larger; Compare K.N.2.b 22 41 the number of objects in two groups using the words fewer than, more than, the same as. K.N.2.h Compose and decompose numbers from 11 to 19 into a group of ten ones and some more K.N.3.a 41, 43, 45, 46, 48, 50 43 ones. Represent and explain addition and subtraction as part-whole relationships; Compose and K.N.4.a decompose numbers less than or equal to 10 into pairs in more than one way; Find the K.N.4.b Number and number that makes 10 when added to the given number. K.N.4.c 24, 30, 31, 32, 34, 36, 40, 47, 49, 50 12, 19, 30, 31, 34, 36, 40, 46, 47 Algebra Efficiently, flexibly, and accurately add and subtract within 5; Solve problems that involve K.N.4.d addition and subtraction within 10 K.N.4.e Identify and name two-dimensional shapes including circles, triangles, squares, and rectangles K.G.1.a 4, 6, 9, 15, 23 6, 15, 23 regardless of orientation or size. Identify and name three-dimensional shapes including spheres, cubes, cylinders, and cones K.G.1.b 35, 44 regardless of orientation or size. Describe the relative positions of shapes in relation to other objects or shapes using terms K.G.1.c 57, 78, 94 57, 78, 94 such as above, below, in front of, behind, and next to. K.G.1.e Combine simple shapes to compose larger shapes. Describe the measurable attribute (length) of authentic objects; Directly compare two objects K.G.2.a 13, 26 Geometry K.G.2.b with a measurable attribute in common to describe which object is longer/shorter. Describe the measurable attribute (capacity) of authentic objects; Directly compare two K.G.2.a objects with a measurable attribute in common to describe which object has more/less-38 38 K.G.2.b capacity. Describe the measurable attribute (weight) of authentic objects; Directly compare two objects K.G.2.a 29 with a measurable attribute in common to describe which object is heavier/lighter. K.G.2.b Identify the name and value of pennies, nickels, and dimes. K.G.3.a Identify the parts of digital and analog clocks. Tell and write time to the hour using digital K.G.3.b 39.42 clocks and analog clocks using only the hour hand. Identify, sort, and classify objects by size, shape, color, and other attributes; Identify objects K.D.1.a Data 8 K.D.1.b

that do not belong to a particular group and explain the reasoning used.





Additional Mathseeds Resources							
Fluency	Assessment						
Driving Tests (DT)	Printable Achievement						
Mental Minute (MM)	Standards Assessment						
DT Kindergarten Number 1, 2, 4, 6, 7, 10, 13, 14, 17-19, 21, 24, 25	Kindergarten Number Tests 2, 4 - 6						
DT Kindergarten Number 3, 5,	Kindergarten Number						
9, 15, 16, 22, 23	Test 1						
DT Kindergarten Number 8, 20	Kindergarten Number Test 3						
DT Kindergarten Number 11, 12	Kindergarten Number Test 5						
DT Kindergarten Operations 1 - 25 MM Addition Sprints MM Subtraction Sprints	Kindergarten Operations Tests 1 - 4						
DT Kindergarten Geometry	Kindergarten Geometry						
1 - 8, 20	Tests 1, 3						
DT Kindergarten Geometry	Kindergarten Geometry						
15 - 23	Tests 2, 3						
DT Kindergarten Geometry	Kindergarten Geometry						
9 - 11, 13, 14	Tests 5, 6						
DT Grade 1 Geometry	Grade 1 Geometry: Shape						
4, 5, 11, 12, 14 - 16	Tests 7, 8						
DT Kindergarten Geometry 12	Kindergarten Geometry Test 4						
DT Kindergarten Measurement	Kindergarten Measurement						
2, 3, 5, 6, 9, 10	Tests 1 - 3						
DT Kindergarten Measurement	Kindergarten Measurement						
11, 15, 16, 20	Test 5						
DT Kindergarten Measurement	Kindergarten Measurement						
7, 8, 11, 12	Test 4						
	Kindergarten Number Test 5						
DT Kindergarten Measurement	Kindergarten Measurement						
1, 4, 13, 14, 17 - 19	Tests 6, 7						
DT Kindergarten Data 1 - 10	Kindergarten Data Tests 1, 2						

	GRADE 1		Math	seeds Lesson #	Additional Mathseeds Resources		
G			Knowledge and Skills Assessment		Higher Order Thinking Skills	Fluency	Assessment
Strand	Substrand	Code	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	Recognize and label arrangements for briefly shown collections up to 20; Count by ones and tens within 120 starting at any given number; Understand that the given number is a direct representation of the total objects in a given set. Count on each successive number and count back each proceeding number; Write numerals to match a representation of a given set of objects for numbers up to 120; Understand that the two digits of a two-digit number represent a composition of some tens and some ones; Compare two-digit numbers using words and symbols.	1.N.1.a 1.N.2.a 1.N.2.b 1.N.2.c 1.N.3.a 1.N.3.b	56, 60, 63, 67, 75, 81, 86		56, 60, 63, 67, 75, 81	DT Grade 1 Number 1 - 24	Grade 1 Number and Algebra: Whole Numbers Tests 1 - 9 Grade 1 Number and Algebra: Place Value Tests 1 - 6
	Understand patterns of skip counting by 2s, 5s, and 10s.	1.N.2.d	77, 79, 90		77, 79	DT Grade 1 Patterns and Fractions 7 - 10	Grade 1 Number and Algebra: Patterns Tests 1, 3, 4, 6, 7
	Add and subtract within 20, using flexible strategies; Efficiently add and subtract within 10; Use the commutative property of addition to develop addition strategies and compose/decompose numbers to develop addition and subtraction strategies; Solve addition problems of three whole numbers whose sum is less than or equal to 20.	1.N.4.a 1.N.4.b 1.N.5.d 1.N.5.e	51, 53, 58, 65, 68, 72, 85			DT Grade 1 Operations 1 - 6 MM Addition Sprints MM Subtraction Sprints	
	Find the difference between two numbers that are multiples of 10, ranging from 10 to 90, and write the corresponding equations; Mentally find 10 more or 10 less than two-digit number without having to count and explain the reasoning used.	1.N.4.c 1.N.4.d	96, 98		96, 98	DT Grade 1 Operations 13 - 15, 17 - 20	
	Add within 100; Subtract multiples of ten from two-digit numbers; Use strategies that reflect an understanding of place value, the relationship between addition and subtraction, and the properties of operations; Understand that in adding two-digit numbers; sometimes it is necessary to compose a ten.	1.N.4.e 1.N.4.f 1.N.4.g	88, 95, 96, 98, 100			DT Grade 1 Operations 13 - 15, 17 - 20	
Number and	Use the meaning of the equal sign to determine if equations are true and give examples of equations that are true.	1.N.5.a	76			DT Grade 1 Operations 10, 11	
	Use the relationship of addition and subtraction to solve subtraction problems; Determine the unknown whole number in an addition or subtraction equation.	1.N.5.b 1.N.5.c	93			DT Grade 1 Operations 16	
	Solve problems involving addition and subtraction within 20 with unknowns in all parts of the addition or subtraction problems with a symbol for the unknown number to represent the problem; Create an authentic problem to represent a given equation involving addition and subtraction within 20.	1.N.5.f 1.N.5.g	68, 88, 92, 100			DT Grade 1 Operations 8, 12	
	Determine geometric attributes of two-dimensional shapes regardless of orientation or size for rhombi, trapezoids, and hexagons; Describe lines and sides of shapes as parallel or non-parallel.	1.G.1.a 1.G.1.c	52, 69, 102		52, 69	DT Grade 1 Geometry 1 - 3, 6, 9, 10, 13	Grade 1 Geometry: Shape Tests 1, 2, 5, 6
	Determine geometric attributes of three-dimensional shapes including cones, cylinders, cubes, and rectangular prisms regardless of orientation or size.	1.G.1.b	62, 69, 99		62	DT Grade 1 Geometry 7 - 9, 17 - 19	Grade 1 Geometry: Shape Tests 3 - 6
Geometry	Partition circles and rectangles into two and four equal parts using the language halves and fourths.	1.G.1.d	61, 66			DT Grade 1 Patterns and Fractions 3, 5, 6, 11	Grade 1 Number and Algebra: Fractions and Money Tests 1 - 3, 7
	Measure the length of an object as a whole number of same-size, non-standard units by placing them end to end; Order three objects by directly comparing their lengths or indirectly by using a third object.	1.G.2.a 1.G.2.b	55, 88			DT Grade 1 Measurement 2, 4, 13, 14	Grade 1 Measurement: Length and Capacity Tests 1 - 5
	Understand the value of dimes and pennies related to tens and ones and solve problems involving dimes and pennies using the ¢ symbol appropriately; Count collections of like coins relating to patterns of counting by 1s, 5s and 10s.	1.G.3.a 1.G.3.b	64, 83, 92		83	DT Grade 1 Measurement 3, 5 - 7, 12	Grade 1 Number and Algebra: Fractions and Money Tests 4 - 8
	Tell and write time to the half hour and hour using analog and digital clocks.	1.G.3.c	54, 70, 87		87	DT Grade 1 Measurement 1, 8 - 10, 15, 16	Grade 1 Measurement: Time Tests 1 - 6
Data	Collect, organize, and represent a data set with up to three categories using a picture graph; 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.	1.D.1.a 1.D.2.a	80, 97		80	DT Grade 1 Data 1 - 3, 9, 10, 12 - 16	Grade 1 Statistics: Data Tests 1 - 5





	GRADE 2 🛛 🛃		Mathseeds Lesson #			Additional Mathseeds Resources		
A.V			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment	
Strand	Substrand	Code	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	Recognize and label structured arrangements for briefly shown collections; Count within 1,000, 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 to 1,000 using standard, word, and expanded forms; Understand 100 as a composition of ten tens and that the three digits of a three-digit number represents a composition of some hundreds, some tens, and some ones.	2.N.1.a 2.N.2.a 2.N.3.a 2.N.3.b	101, 105, 106, 108, 117, 129		105, 106, 108, 117	DT Grade 2 Number 1 - 13, 16 - 24 DT Grade 2 Operations 3	Grade 2 Number and Algebra: Numbers to 1000 Tests 1 - 5, 7 Grade 2 Number and Algebra: Number Patterns Tests 1 - 8	
	Compare two three-digit numbers by using symbols <, >, = and justify the comparison based on the value of the hundreds, tens, and ones.	2.N.3.c	122			DT Grade 2 Number 2, 6, 9, 14, 15, 17	Grade 2 Number and Algebra: Numbers to 1000 Test 6	
Number and Algebra	Fluenty add and subtract within 20; Add and subtract using 100 strategies based on place values; Add and subtract within 1,000 using concrete models, drawings, and strategies that reflect an understanding of place value and the properties of operations.	2.N.4.a 2.N.4.b 2.N.4.e	103, 110, 118, 120, 124, 128, 131, 133, 134, 142, 144, 146	, 137, 139, 140,	104, 110, 118, 120, 124, 128, 131, 134, 137, 139, 141, 142, 150	DT Grade 2 Operations 2, 5, 7, 9, 13, 16, 17, 20 - 22, 24 - 28	Grade 2 Number and Algebra: Addition and Subtraction Tests 1 - 8	
	Mentally add or subtract 10 or 100 to or from a given number 100 to 900.	2.N.4.c	148		148	DT Grade 2 Operations 7, 13, 27, 28		
	Add up to three two-digit numbers using strategies based on place value and understanding of properties.	2.N.4.d	150		104	DT Grade 2 Operations 18, 23	Grade 2 Number and Algebra: Addition and Subtraction Test 5	
Geometry	Recognize and describe all faces of three-dimensional shapes as two-dimensional shapes. Identify and count attributes of solid shapes.	2.G.1.a	121		121, 140	DT Grade 2 Geometry 3, 5 - 7	Grade 2 Geometry: Shape and Movement Tests 3 - 5	
	Recognize and draw two-dimensional shapes having a specific number of sides, angles, and vertices.	2.G.1.b	102, 119, 140, 145		102, 119, 121, 140, 145	DT Grade 2 Geometry 1, 2, 4 - 7, 9 - 12	Grade 2 Geometry: Shape and Movement Tests 1, 2, 5, 6	
	Partition a rectangle into rows and columns or equal-sized squares and count to find the total; Divide circles and rectangles into two, three, or four equal parts and describe the parts; Recognize that equal shares of identical wholes need not have the same shape.	2.G.1.c 2.G.1.d 2.G.1.e	132, 138		132	DT Grade 2 Patterns and Fractions 5, 11, 12, 14 - 17	Grade 2 Number and Algerba: Fractions and Money Tests 1 - 4	
	Measure the length of an object using two different length units and describe how the measurements relate to the size of the specific unit; Compare the difference in length of objects using inches and feet or centimeters and meters; Identify and use appropriate tools for measuring length; Measure and estimate lengths using whole numbers with inches, feet, centimeters, and meters.	2.G.2.a 2.G.2.b 2.G.3.a 2.G.3.b	104, 126, 140, 143		104, 141	DT Grade 2 Measurement 6, 9, 11, 13, 15, 19, 21 - 24	Grade 2 Measurement: Informal Units Tests 1, 2, 8	
	Represent whole numbers as equally spaced lengths on a number line diagram. Use number lines to find sums and differences within 100; Use addition and subtraction within 100 to solve problems using the same standard-length units.	2.G.4.a 2.G.4.b	58, 110, 139, 150		110, 113, 139	DT Grade 1 Operations 7, 9 DT Grade 2 Operations 1, 4, 14, 15		
	Solve problems involving dollar bills, quarters, dimes, nickels, and pennies using \$ and ¢ symbols appropriately.	2.G.5.a	125, 147, 159		125, 131, 147	DT Grade 2 Measurement 12	Grade 2 Number and Algerba: Fractions and Money Tests 5 - 8	
	Identiy and write time to five-minute intervals using analog and digital clocks and both a.m. and p.m.	2.G.5.b	109, 114, 123, 127		109	DT Grade 2 Measurement 1 - 5, 7, 10, 14, 16, 20	Grade 2 Measurement: Time Tests 1 - 5	
Data	Ask questions to generate data and represent the data using scaled pictures graphs and bar graphs with up to four categories; Create and represent a data set by making a line plot using whole numbers; Analyze data using scaled picture graphs or bar graphs with up to four categories. Solve problems including one-step comparison problems, using information from the graphs.	2.D.1.a 2.D.1.b 2.D.1.c 2.D.2.a	140, 143		143	DT Grade 2 Data and Chance 1, 4, 5, 7 - 14	Grade 2 Statistics: Data Tests 1 - 6	





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	GRADE 3		Mathseeds Lesson #			Additional Mathseeds Resources	
ar			Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Strand	Substrand	Code	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	Read, write, and demonstrate multiple equivalent representations for numbers up to 10,000 using objects or visual representations including standard form and expanded form; Represent and justify comparisons of whole numbers up to 10,000 using number lines.	3.N.1.a 3.N.1.b	151, 156, 161, 194		151, 156, 161, 194		
	Partition two-dimensional figures into equal areas and express the area of each part as a unit fraction of the whole; Find parts of a whole using visual fraction models; Represent and understand a fraction as a number on a number line.	3.N.2.a 3.N.2.b 3.N.2.c	160, 175, 180, 191, 197		191		
	Show and identify equivalent fractions using visual representations.	3.N.2.d	180, 191		180, 197		
	Justify whole numbers as fractions and identify fractions that are equivalent to whole numbers.	3.N.2.e	191, 197		191, 197		
	Compare and order fractions having the same numerators or denominators by reasoning about their size.	3.N.2.f	160, 175, 191		175		
Algebra	Add and subtract up to four-digit whole numbers using strategies based on place value and algorithms; Determine the reasonableness of whole number sums and differences using estimations and number sense.	3.A.1.a 3.A.1.b	153, 163, 166, 170, 173, 178, 195		153, 163, 170, 173, 178		
	Solve and write one-step whole number equations to represent problems using the four operations including equations with an unknown start or result; Interpret and solve two-step problems involving whole numbers and the four operations.	3.A.1.c 3.A.1.d	159, 163, 168, 170, 171, 173, 178, 183, 186, 188, 190, 193, 195, 196		159, 163, 168, 170, 173, 176, 178, 181, 183, 186, 188, 193, 195, 196, 199		
	Use drawings, words, arrays, symbols, repeated addition, equal groups, and number lines to interpret and explain the meaning of multiplication and division and their relationship.	3.A.1.f	71, 74, 111, 113, 155		113	DT Grade 2 Operations 6, 8 - 12, 19	Grade 2 Number and Algebra: Equal Groups Tests 1 - 5
	Apply commutative, associative, distributive, identify, and zero properties as strategies to multiply and divide; Fluently multiply and divide within 100 using strategies based on understanding and properties of operations; Multiply one-digit whole numbers by multiples of 10 using strategies based on place value and properties of operations.	3.A.1.e 3.A.1.g 3.A.1.h	155, 158, 165, 168, 171, 176, 181, 186, 190, 193, 196, 199		168, 176, 181, 186, 188, 193, 196, 199		
	Sort quadrilaterals into categories according to their attributes.	3.G.1.1	152, 169, 177, 184				
	Solve problems involving perimeters of polygons when given the side lengths or when given the perimeter and unknown side length(s).	3.G.2.a	192				
Geometry	Use 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; Show that area can be additive and is the same as would be found by multiplying the side lengths.	3.G.2.b 3.G.2.c	59, 112, 149, 157, 200		59, 149, 200		Grade 2 Measurement: Informal Units Tests 3, 8
	Identify and use the appropriate tools and units of measurement, both customary and metric, to solve problems involving length; Estimate and measure length to the nearest half inch, fourth inch, and centimeter.	3.G.3.a 3.G.3.b	182		182		
	Identify and use the appropriate tools and units of measurement, both customary and metric, to solve problems involving weight and mass.	3.G.3.a	73, 135, 172		135, 172	DT Grade 2 Measurement 17, 18	Grade 2 Measurement: Informal Units Tests 6 - 8
	Identify and use the appropriate tools and units of measurement, both customary and metric, to solve problems involving liquid volume and capacity.	3.G.3.a	89, 116, 154		154	DT Grade 2 Measurement 8	Grade 2 Measurement: Informal Units Tests 4, 5, 8
	Tell and write time to the minute using both analog and digital clocks; Solve authentic problems involving addition and subtraction of time intervals and find elapsed time.	3.G.4.a 3.G.4.b	162, 179, 185, 189		179, 185, 189		
Data	Create scaled picture graphs and scaled bar graphs to represent a data set with more than four categories; Generate and represent data using line plots where the horizontal scale is marked off in halves and whole number units; Analyze data and make simple statements using information represented in picture graphs, line plots, and bar graphs.	3.D.1.a 3.D.1.b 3.D.2.a	174, 187, 198		187		

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