To access the Illustrative Math program, you may login via the ILC app on Clever, or create a login using your district email at https://msad54.ilclassroom.com.

MSAD # 54 - Grade 1 MATH Curriculum							
CCSS Student Mathematical Practices							
Practice 1: Make Sense of Problems and Persevere in Solving Them MP1	**Practice 2:** Reason Abstractly and Quantitatively MP2	**Practice 3:** Construct Viable Arguments and Critique the Reasoning of Others MP3	**Practice 4:** Model with Mathematics MP4	**Practice 5:** Use Appropriate Tools Strategically MP5	**Practice 6:** Attend to Precision MP6	**Practice 7:** Look for and Make Use of Structure MP7	**Practice 8:** Look for and Express Regularity in Repeated Reasoning MP8

The big ideas in grade 1 include: developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; developing understanding of whole-number relationships and place value, including grouping in tens and ones; developing understanding of linear measurement and measuring lengths as iterating length units; and reasoning about attributes of, and composing and decomposing geometric shapes.

The mathematical work for grade 1 is partitioned into 8 units:
IM Unit 1: Adding, Subtracting, and Working with Data
IM Unit 2: Addition and Subtraction Story Problems
IM Unit 3: Adding and Subtracting within 20
IM Unit 4: Numbers to 99
IM Unit 5: Adding within 100
IM Unit 6: Length Measurements within 120 Units
IM Unit 7: Geometry and Time
IM Unit 8: Putting it All Together
District Resources for Supplementing: IXL IM Aligned Skills Plan for 1st Grade
IM 1st Grade Collaborative Resource Folder

MSAD # 54 - Grade 1 MATH Curriculum		
Algebraic Reasoning Algebraic reasoning is about generalizing arithmetic operations and determining unknown quantities by recognizing and analyzing patterns along with developing generalizations about these patterns.		
Performance Indicators	**Suggested Learning Targets**	**Assessment and Teacher Resources**
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.		
1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. Unit 2 - Lessons: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 Unit 3- Lessons: 2, 6, 10, 11, 12, 13, 17, 22, 25, 26, 28 Unit 4- Lessons: 13 Unit 5-Lessons: 4 Unit 6-Lessons: 11, 12, 13, 14, 15, 17 Unit 8-Lessons: 4, 5, 6	• I can solve addition and subtraction word problems using objects, drawings, and equations. • I can solve word problems with unknown numbers in different positions.	**MAT.AR.PROBSOLV1** Students will use models to solve word problems involving addition and subtraction. (1)
1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. **Unit 2 -** Lessons: 21 **Unit 3-** Lessons: 15, 20, 28	• I can add three whole numbers whose sum is less than or equal to 20. • I can solve word problems with three numbers using objects, drawings, and equations.	

Unit 4 - Lessons: 9 **Unit 6 -** Lessons: 11 **Unit 8 -** Lessons: 6		
Understand and apply properties of operation and the relationship between addition and subtraction within 20.		
1.OA.B.3 Apply properties of operations as strategies to add and subtract. Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) **Unit 2 -** Lessons: 9 **Unit 3-** Lessons: 2, 3, 4, 15, 16, 17, 19, 28	• I can show that adding zero to any number does not change the number (e.g., 4 + 0 = 4) (Identity Property) • I can show that changing the order of the addends (numbers) does not change the sum (answer). (Commutative Property) • I can show when adding three numbers in any order, the sum does not change (e.g., 2 + 3 + 1 = 3 + 1 + 2) (Associative Property) • I can use properties of operations to add.	**No Report Card Indicator**
1.OA.B.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 - 8 by finding the number that makes 10 when added to 8. **Unit 1 - Lessons:** 10, 11, 14 **Unit 2-** Lessons: 3, 6, 15, 18, 19, 20, 21, 22 **Unit 3-** Lessons: 5, 10, 12, 22, 24, 25, 26 **Unit 6-**Lessons:11, 14	• I can give an example and explain how a subtraction equation can be written as an addition equation. • I can rewrite a subtraction equation as an addition equation with a missing addend (number).	**No Report Card Indicator**
1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). **Unit 1 - Lessons:** 1, 2, 3, 4, 5, 6, 7,9,10,11,13,14 **Unit 2 -** Lessons: 3, 5, 10, 12, 14 **Unit 3 -** Lessons: 2, 4, 5, 6, 13, 15, 21, 22, 24, 25, 27 **Unit 4 -** Lessons: 1, 3, 6, 9, 13, 14 **Unit 5** - Lessons: 13 **Unit 6 -** Lessons: 1, 4, 5, 10	• I can add by counting all, counting on, and recognizing the +1 means the next number and +2 means the next *next* number in the counting sequence. • I can subtract by counting back, counting up from, and recognizing the -1 means the number before, and -2 means the number that is two numbers before in the counting sequence.	**No Report Card Indicator** **Practiced & Reinforced by Centers:** ☐

1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as **counting on**; **making ten** (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); **decomposing a number leading to a ten** (e.g., 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9); **using the relationship between addition and subtraction** (e.g., knowing that 8 + 4 = 12, one knows 12 - 8 = 4); and **creating equivalent but easier or known sums** (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). **Unit 1 - Lessons:** 1, 2, 3, 4, 5, 6, 7, 10, 11, 13, 14 **Unit 2 - Lessons:** 2, 3, 5, 6, 7, 8, 14, 15, 16, 17, 20, 21 **Unit 3 - Lessons:** 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 **Unit 4 - Lessons:** 1, 3, 5, 6, 9, 12, 13, 14 **Unit 5 - Lessons:** 4, 6, 8, 13 **Unit 6 - Lessons:** 1, 4, 5, 10, 11, 12, 13, 14, 15, 17 **Unit 7 - Lessons:** 4, 5, 8, 12, 17 **Unit 8 - Lessons:** 1, 2, 3, 4, 5, 6, 8	• I can add and subtract within 10 with ease. • I can add and subtract within 20 by counting on and making a ten. • I can add and subtract within 20 by using the relationship between addition and subtraction. • I can add and subtract within 20 by using equal but more compatible numbers (e.g., doubles, doubles plus one, doubles minus one).	**MAT.AR.FLUADD1** Students will add fluently within 10. (1) **MAT.AR.FLUSUB1** Students will subtract fluently within 10. Assessment Resource for +/- fluency. **MAT.AR.ADD201** Students will use strategies to add within 20. (1) **MAT.AR.SUB201** Students will use strategies to subtract within 20. (1)
1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 - 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2. **Unit 2 - Lessons:** 4, 9, 14, 17 **Unit 3 - Lessons:** 3, 4, 11, 14, 16, 15 **Unit 5 -Lessons:** 11 **Unit 6 - Lessons:** 14 **Unit 7 - Lessons:** 15 **Unit 8 - Lessons:** 5	• I can explain that the equal sign means “same as.” • I can compare the value of both sides of an equation and determine whether the equation is true or false.	**No Report Card Indicator**

1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ - 3, 6 + 6 = _. **Unit 2 -** Lessons: 8, 18, 21 **Unit 3 -** Lessons: 2, 4, 5, 7, 9, 10, 11, 12, 13, 14, 18, 24 **Unit 4 -** Lessons: 1, 3, 5, 6, 13 **Unit 5 -** Lessons: 4, 8, 10, 13 **Unit 8 -** Lessons: 2, 3	• I can determine the unknown value in an addition or subtraction equation when two out of the three numbers in the equation are given.	**No Report Card Indicator**

MSAD # 54 - Grade 1 MATH Curriculum		
Geometric Reasoning Geometric reasoning is the use of critical thinking, logical argument and spatial reasoning to solve problems and find new relationships. Students must first have a critical understanding of any underlying assumptions and relationships. This allows them to develop coherent knowledge and apply their reasoning skills.		
Performance Indicators	**Suggested Learning Targets**	**Teacher Resources**
Describe and compare measurable attributes.		
1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. **Unit 6 - Lessons:** 1, 2, 3, 5	• I can recognize when an object is longer or shorter than another object. • I can organize three objects by length in order from the shortest to longest. • I can compare the lengths of two objects by using a third object.	**MAT.SR.MEAS1** Students will measure, compare, and estimate lengths. (1)
1.MD.A.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. **Unit 6 - Lessons:** 5, 6, 7, 8, 9, 10, 11, 16	• I can explain how to use a shorter object to measure the length of a longer object and explain why it is important to avoid gaps and overlaps. • I can report the length of an object as the total number of shorter objects it takes to span the longer object without gaps and overlaps. • I can represent the length of the longer object with a whole number.	
Work with time and money.		

1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks. **Unit 7 - Lessons:** 13, 14, 15, 16, 17	• I can identify a digital and an analog clock. • I can identify the hours and minutes on a digital and analog clock. • I can tell how many minutes are in an hour. • I can explain why 30 minutes is a half-hour.	**MAT.SR.TELLTIME1** Students will tell time to the nearest hour and half hour on digital and analog clocks. (1)
	• I can look at the time on an analog clock (when the minute hand is pointing to 12 or 6), say what time it is, and write the time as it would appear on a digital clock. • I can look at the time on a digital clock (when minutes are displayed as :00 or :30, say what time it is, and draw in the hands on an analog clock. • I can write the time and draw the hands on an analog clock when someone tells me the time (when stated as "__ o'clock" or "__ thirty" or "half past__).	**MAT.SR.TIME1** Students will show time to the nearest hour and half hour on digital and analog clocks. (1)
1.MD.D.5 (Maine Learning Results Only) Identify the coins and each corresponding value. (e.g. penny, nickel, dime, and quarter)	• I can tell the name of each coin by looking at it. • I can tell how much a coin is worth by looking at it. ○ Penny, Nickel, Dime, Quarter • Given the name of a coin, I can tell you how much it's worth. • Given an amount, I can tell which coin is worth that amount. •	**MAT.SR.MONEY1** Students will identify coins and their values. (1) Trade Up - Money Game Assessment Resource for 1.MD.D.5 **Money Bingo & Other IXL Skills to Practice** ***Center Games from Grade 2** ***Number Routines**
Represent and interpret data.		

1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. **Unit 1 - Lessons:** 7, 8, 9, 11, 12, 13, 14, 15 **Unit 2 - Lessons:** 3, 5, 13	• I can organize data in up to three categories (groups). • I can represent data in up to three categories.	**MAT.SR.ORGDATA1** Students will organize data into a chart or graph. (1)
	• I can answer questions about the total number of data points and how many data points are in each category. • I can determine when a category has more or less than another category.	**MAT.SR.DATAQS1** Students will ask and answer questions about charts and graphs. (1)

MSAD # 54 - Grade 1 MATH Curriculum		
Standard 4: Geometry **Students will be able to understand and apply geometric theorems.**		
Performance Indicators	**Suggested Learning Targets**	**Assessment and Teacher Resources**
Identify, describe, analyze, compare, create, and compose shapes based on their attributes.		
1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. **Unit 7 - Lessons:** 4, 5, 6, 8, 12	• I can explain the difference between the defining attributes (e.g., sides, angles, faces) and non-defining attributes (e.g., color, orientations, overall size). • I can construct and draw a shape when given defining attributes. • I can identify two-dimensional and three-dimensional shapes.	**MAT.GR.SHAPES1** Students will build and compare shapes based on their attributes. (1)

1.G.A.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.* **Unit 7- Lessons:** 2, 7, 8, 12, 17	● I can create new shapes using two-dimensional and/or three dimensional shapes, and describe the new shape by its attributes. ● *Students do not need to know the formal names of the new figures.	**No Report Card Indicator**
1.G.A.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. **Unit 7- Lessons:** 8, 10, 11	● I can partition circles and rectangles into two and four equal parts. ● I can describe the equal parts of a circle and rectangle with words (halves, fourths, and quarters). ● I can describe the whole by the number of equal parts (e.g., two halves make a whole). ● I can explain the more equal parts in a given shape, the smaller the parts.	**No Report Card Indicator**

MSAD # 54 - Grade 1 MATH Curriculum		
Quantitative Reasoning Students will be able to reason and model quantitatively, using units and number systems to solve problems.		
Performance Indicators	**Suggested Learning Targets**	**Assessment and Teacher Resources**
Extend the counting sequence.		
1.NBT.A.1 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. **Unit 2 - Lessons:** 8, 19 **Unit 3- Lessons:** 12, 24, 25 **Unit 4- Lessons:** 1, 2, 3, 6, 7, 8, 9, 10, 12, 13, 14, 18, 19, 23 **Unit 5-Lessons:** 1, 2, 4, 13 **Unit 6-Lessons:** 9, 12, 15, 16 **Unit 7-Lessons:** 15 **Unit 8-Lessons:** 7, 8	• I can count to 120. • I can count to 120 starting from any number.	**MAT.QR.COUNTON1** Students will count to 120 starting from any number. (1) Assessment Resource for 1. NBT.A.1
	• I can read any number up to 120. *Note: The word *and* is only used when there is a decimal. Ex: 345 Three hundred forty-five	**MAT.QR.RECNUM1** Students will recognize numbers up to 120. (1)
	• I can write any number up to 120. • I can label a set of objects up to 120 with the written numeral.	**MAT.QR.WRTNUM1** Students will write any number up to 120. (1)
Understand place value.		
1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: **Unit 4 - Lessons:** 1, 2, 3, 5, 6, 7, 8, 9, 10 , 11, 14, 18, 22 **Unit 5–Lessons:** 1		

1.NBT.B.2.A 10 can be thought of as a bundle of ten ones — called a "ten." **Unit 3 - Lessons:** 8, 9 **Unit 4- Lessons:** 6, 8, 19, 20	• I understand that 10 can be thought of as a bundle of ten ones called a “ten.” • I can represent 10 as ten ones.	**MAT.QR.PLCVALU1** Students will correctly represent a number as tens and ones, up to 99. (1)
1.NBT.B.2.B The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. **Unit 3 - Lessons:** 8, 9, 10 **Unit 4- Lessons:** 7, 20	• I can represent the numbers 11 to 19 as a ten and some ones.	
1.NBT.B.2.C The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). **Unit 4 - Lessons:** 2, 3, 4, 6, 7, 11, 14, 16, 17, 19, 20, 21, 22, 23	• I can represent multiple sets of ten using number names (2 tens is 20). • I can explain the value of each digit in a two-digit number.	
1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. **Unit 4 - Lessons:** 14, 15, 16, 17, 18, 19, 21, 22, 23 **Unit 5 - Lessons:** 13, **Unit 6 - Lessons:** 1, 4 **Unit 8 - Lessons:** 9	• I can determine when a two-digit number is greater than, less than, or equal to another two-digit number. • I can explain why a two-digit number is greater than, less than, or equal to another two-digit number. • I can record the comparison using the symbols >,<,=.	**MAT.QR.COMPARE1** Students will compare two-digit numbers. (1)
Use place value understanding and properties of operations to add and subtract.		
1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit	• I can use concrete models or drawings to show a strategy based on place value or other strategies to add a 2-digit number and a 1-digit number, a	**MAT.QR.PROPOP1** Students will use place

number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. **Unit 4 - Lessons:** 3, 4, 5, 6, 9, 11, 12, 13, 18, 19, 21 Unit 5 - Lessons: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 Unit 6 - Lessons: 1, 2, 4, 5, 10, 16 Unit 7 - Lessons: 4, 5, 6, 12, 14, 16, 17 Unit 8 - Lessons: 5	2-digit number and a multiple of 10, or a 2-digit number and a 2-digit number. ● I can write down and explain the steps that I followed as I used the concrete models or drawings to show how I added.	value strategies to add and subtract within 100. (1)
1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. **Unit 4- Lessons:** 3, 4, 6, 12, 13, 14, 15, 18 **Unit 5-Lessons:** 14 **Unit 6-Lessons:** 1, 4, 5, 10 **Unit 7-Lessons:** 11	● I can mentally find 10 more for any two-digit number. ● I can mentally find 10 less for any two-digit number. ● I can explain why the tens digit increases or decreases by 1 when 10 is added or subtracted. ● I can subtract a multiple of 10 from a multiple of 10.	
1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. **Unit 4 - Lessons:** 3, 4, 5, 6, 9, 12, 13, 18 **Unit 5 - Lessons:** 14	● I can explain my strategy for subtracting a multiple of 10 from a multiple of 10. ● I can explain how subtracting a multiple of ten is related to subtracting the tens digits.	