ST. LOUIS PUBLIC SCHOOLS

Language Companion to the DESE Math Model Curriculum, Grade 1

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Grade 1- Addition and Subtraction Problem Solving

Essential Measurable Learning Objectives	Language Objective	Sentence Frame
Students will apply the meaning of the equal sign to determine if the equations are true or false.	Students will orally explain equality on both sides of the equal sign using the logical connector *because*.	_____ is/is not equal to ____ because _____.
Students will use symbolic algebra; determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.	Students will label sample equations using target noun vocabulary: *commutative property, fact family, combination, total, difference, and addend.*	
Students will interpret the story and determine the operation and strategy needed to solve the problem.	Students will explain orally the strategy used to determine the operation and solution of a problem using the key words: a*ltogether, in all, sum, combine, add, making tens, counting on, counting all, counting back, and estimation.*	I chose ___ to solve this problem because_____.
Students will represent/model a given situation involving addition and subtraction of whole numbers using pictures, objects, or symbols.	Students will label a visual representation of a word problem using technical math vocabulary: *making tens, counting on, counting all, counting back, and estimation*.	

Grade 1– Addition and Subtraction to 20

Essential Measurable Learning Objectives	Language Objective	Sentence Frame
Students will add and subtract by adding and subtracting by one and two in the counting sequence.	Students will explain orally to a partner in complete sentences how to add and subtract by counting on and counting back with cubes or a number line.	To add, I need to count on_____ from ____ (*the given number*). To subtract, I need to count back_____ from ____ (*the given number*).
Students will add and subtract within 20 by using equal but easier numbers (e.g. Making ten, using doubles, using doubles plus and minus one and using the relationship between addition and subtraction).	Students will explain orally the addition/subtraction strategy: *making tens, doubles, or doubles plus and minus one* in a complete sentence.	When I added __+___, I used the _____ strategy. If ___+____=___, then ___+____= ____.
Students will explain how addition and subtraction are related.	Students will use the part/part whole model to write *if…then* statements using key vocabulary: *plus, equals, and minus*.	*If* ____ plus ____ equals _____, *then* ____ minus ____ equals _____.
Students will identify the unknown number in an addition and subtraction problem.	Students will explain to a partner on how to identify the unknown number in an addition and subtraction problem using key vocabulary: *part, whole, counting up, counting down*.	$8 + \square = 10$. I know 10 is the whole and 8 is a part. I will find the missing part by _____ (*strategy*).

Grade 1- Place Value and Operations

Essential Measurable Learning Objectives	Language Objective	Sentence Frame
Students will add within 100 using concrete models or drawings to show a strategy based on place value (collecting the tens, collecting the ones, and if necessary, composing ten ones to make a ten) or other strategies.	Students will label the drawings and equation using target math vocabulary: *ones, tens, digits, numbers, symbols, equals.*	
Students will mentally find 10 more for any two- digit number (e.g.,32+10=42) and mentally find 10 less for any two- digit number(e.g.,32-10=22).	Students will listen to and record sum or difference.	
Students will subtract a multiple of 10 from a multiple of 10 (e.g., subtract 90-40) and explain the strategy used.	Students will write a cloze explanation of the strategy using target math vocabulary: *add, subtract, place value, compose, decompose, multiple of 10.*	___ minus 10 equals ____ because _____.

Grade 1– Understanding Place Value

Essential Measurable Learning Objectives	Language Objective	Sentence Frame
Student will count to 120, starting with any number less than 120.	Students will orally describe the strategy they used to count up to 120.	I will start with _____ and stop at 120 by counting on: ___, ___, ….
Students will read and write numerals to 120.	Students will listen to a partner dictate a number up to 120 and then record the number.	
Students will represent a number of objects with a written numeral up to 120.	Students will write the quantity of objects in a set in a complete sentence.	There are _____(*number*) _____(*objects*) .
Students will represent ten as a bundle called a "ten."	Students will explain how a group of ten ones is equal to one ten. The students will share using the target vocabulary (*equal to, same as, tens, and ones*).	____ones are equal to ____ ten(s).
Students will compose and decompose numbers 11- 19.	Students will explain the place value of the numbers 11-19 by writing a complete sentence and drawing a place value model.	____ is equal to ___ tens and ___ ones.
Students will represent multiple sets of ten using number names (2 tens is 20).	Students will state multiple sets of tens using the target vocabulary: *ten, twenty, thirty…ninety*.	___ tens is equal to ___.
Students will explain the value of each digit in a two-digit number.	Students will express the value of a number with a partner using complete sentences.	The value of ___ is ____tens which equals ____ and ____ ones which equals ___. *Example: The value of 47 is 4 tens which equal 40 and 7ones which equal 7.*

Essential Measurable Learning Objectives	Language Objective	Sentence Frame
Students will compare two two-digit numbers and record the results with the symbols >, =, and <.	Students will read the number sentence orally using comparative adjectives in place of the math symbols: *(greater than, less than, or equal to)*.	____ is greater than ____. ____is less than _____. ____ is equal to _____.
Students will explain why a two-digit number is greater than, less than, or equal to another two-digit number.	Students will justify their reasoning orally using place value vocabulary *(tens, ones, value)* in a complete sentence.	____ is *greater than* _____. I know this because ___ has more tens/ones than ____. _____ is *less than* _____. I know this because __ has less tens/ones than ___. _____ is *equal to* _____. I know this because they have the same value.

Grade 1 – Geometry

Essential Measurable Learning Objectives	Language Objective	Sentence Frame
Students will explain the difference between defining attributes and non-defining attributes of shapes.	Students will list defining attributes and non-defining attributes of shapes using the target vocabulary: *sides, angles, closed, lines, color and size.*	I know this shape is a _____, because the attributes are_____, and not because it is _____. *Example: I know this shape is a triangle, because the attributes are three sides and three angles, and not because it is blue.*
Students will construct and draw shapes when given defining attributes.	Students will apply the target vocabulary *(sides, angles, closed, lines, color and size)* by listening to a description of a shape and drawing it.	
Student will identify two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) and three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) shapes.	Students will label 2 and 3D shapes using target vocabulary.	
Students will create new shapes using two-	Students will describe orally and in writing the parts of the new shape.	This is a_____. It is made of _____.

dimensional and/or three- dimensional shapes.		*Example: This is a house. It is made of a square and triangle.*
Essential Measurable Learning Objectives	**Language Objective**	**Sentence Frame**
Students will partition circles, squares, and rectangles into two and four equal parts.	Students will describe orally and in writing how the shapes have been divided using target vocabulary: *equal, circles, squares, rectangles, same as.*	This _____ has ____ equal parts because each part is the same size. *Example: This circle has two equal parts because each part is the same size.*
Students will describe the equal parts of a circle, square and rectangle with the words halves, fourth, and quarters.	Students will label equal parts of the shapes using the target vocabulary: *halves, fourth, and quarters*.	
Students will describe the whole by the number of equal parts.	Students will describe in writing the relationship between equal parts and a whole using *if…then* sentence.	If I have ____ out of ____ equal parts, then I have one whole.
Students will explain the more parts in a given shape, the smaller the parts.	Students will describe orally the size of the parts in a given shape using comparative adjectives (*larger than, more, less, smaller than*.)	*Example: I can see that one fourth of the circle is less than one half of the circle.*