



SuccessMaker®

Alignments to SuccessMaker

Providing rigorous intervention
for K-8 learners with unparalleled precision

Arizona Standards Code	Arizona Mathematics Academic Standards, Kindergarten	SuccessMaker Item Description	Item ID
K.CC	Counting and Cardinality		
K.CC.A	Know number names and the count sequence.		
K.CC.A.1	Count to 100 by ones and by tens.	Find a missing number in a sequence, counting by 1's (1 to 9).	SMMA_LO_00960
K.CC.A.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0 to 20 (with 0 representing a count of no objects).	Match a digit to a set with that number of objects (1 to 5).	SMMA_LO_00934
K.CC.B	Count to tell the number of objects.		
K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.		
K.CC.B.4.a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object (one to one correspondence).	Find the number that comes before a given number, counting by 1's (1 to 9).	SMMA_LO_00949
		Find the next number in a sequence, counting by 1's (1 to 5).	SMMA_LO_00939
		Find the next number in a sequence, counting by 1's (1 to 9).	SMMA_LO_00948
		Count objects by pairing each object with one number 1 to 10; determine how many objects there are.	SMMA_LO_02092
		Find the next number in a sequence, counting by 1's (1 to 5).	SMMA_LO_00940
		Count objects by pairing each object with one number 1 to 10; determine how many objects there are when 1 more is added.	SMMA_LO_02093
K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger (hierarchical inclusion).	Find the next number in a sequence, counting by 1's (1 to 5).	SMMA_LO_00939
		Find the next number in a sequence, counting by 1's (1 to 9).	SMMA_LO_00948
		Find the next number in a sequence, counting by 1's (1 to 5).	SMMA_LO_00940
K.CC.B.5	Count to answer questions about "How many?" when 20 or fewer objects are 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 to 20, count out that many objects.	Count objects by pairing each object with one number 1 to 10; determine how many objects there are.	SMMA_LO_02092
		Count objects not arranged in a row (1 to 5 objects).	SMMA_LO_00935
		Count objects not arranged in a row (6 to 9 objects).	SMMA_LO_00943
		Count objects arranged in a row (1-5 objects).	SMMA_LO_00933
K.CC.C	Compare numbers.		

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K.CC.C.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. (Include groups with up to ten objects.)	Identify a group with fewer objects than a given group (1 to 5 objects).	SMMA_LO_00924
		Identify a group with more objects than a given group (1 to 5 objects).	SMMA_LO_00923
		Identify a set with the same number of objects as a given set (1 to 5 objects).	SMMA_LO_00922
K.CC.C.7	Compare two numbers between 0 and 10 presented as written numerals.	Identify a number that is greater than or less than a spoken number (1 to 9).	SMMA_LO_00946
K.OA	Operations and Algebraic Thinking		
K.OA.A	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.		
K.OA.A.1	Represent addition and subtraction concretely.	Identify the picture that represents a subtraction problem in context (minuends 2 to 10).	SMMA_LO_01542
		Count two sets of objects to find the total (sums 6 to 10).	SMMA_LO_00006
		Count the objects in two sets and add (sums 6 to 10).	SMMA_LO_00008
		Count two sets of objects to find the total (sums 4 to 6).	SMMA_LO_00004
		Identify the pictorial solution to a problem in context (minuends 4 to 9).	SMMA_LO_01423
		Count two sets of objects to find the total (sums 2 to 4).	SMMA_LO_00003
		Identify a picture that represents an addition problem (sums 2 to 6).	SMMA_LO_01228
		Model and apply joining stories to solve problems (sums 1 to 9).	SMMA_LO_01863
		Count objects in two sets and add (sums 1 to 5).	SMMA_LO_00007
		Count two sets of objects to find the total (sums 2 to 5).	SMMA_LO_00005
K.OA.A.2	Solve addition and subtraction word problems and add and subtract within 10.	Model and apply joining stories to solve problems (sums 1 to 9).	SMMA_LO_01863
K.OA.A.3	Decompose numbers less than or equal to 10 into pairs in more than one way (e.g., using fingers, objects, symbols, tally marks, drawings, expressions).	Compose numbers from 11 to 19 given ten ones and some further ones by using objects.	SMMA_LO_02095
		Decompose numbers 2-10 into pairs in more than one way by using objects.	SMMA_LO_02096
K.OA.A.4	For any number from 1 to 9, find the number that makes 10 when added to the given number (e.g., using fingers, objects, symbols, tally marks, drawings, or equation).	Model the number that makes 10 when added to a given number from 1 to 9; then identify the number.	SMMA_LO_02097
K.NBT	Number and Operations in Base Ten		
K.NBT.A	Work with numbers 11 to 19 to gain foundations for place value.		

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K.NBT.A.1	Compose and decompose numbers from 11 to 19 into ten ones and additional ones by using objects, drawings and/or equations. Understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones (e.g., $18 = 10 + 8$).	Decompose numbers from 11 to 19 into ten ones and some further ones.	SMMA_LO_02094
K.MD	Measurement and Data		
K.MD.B	Classify objects and count the number of objects in each category.		
K.MD.B.3	Classify objects into given categories; count the number in each category and sort the categories by count.	Match geometric figures that have the same size and shape (simple figures).	SMMA_LO_00516
		Match simple geometric figures that have the same size, shape, and color.	SMMA_LO_00514
K.G	Geometry		
K.G.A	Identify and describe shapes.		
K.G.A.1	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.	Identify the figure with a different shape.	SMMA_LO_00547
		Match a shape to a picture containing that shape.	SMMA_LO_00548
K.G.A.2	Correctly name shapes regardless of their orientation or overall size (e.g., circle, triangle, square, rectangle, rhombus, trapezoid, hexagon, cube, cone, cylinder, sphere).	Identify triangles or rectangles by name.	SMMA_LO_00530
		Identify circles or squares by name.	SMMA_LO_00529
K.G.A.3	Identify shapes as two-dimensional (lying in a plane, flat) or three-dimensional (solid).	Identify triangles or rectangles by name.	SMMA_LO_00530
		Identify circles or squares by name.	SMMA_LO_00529
		Identify a geometric figure (circle, triangle, rectangle, or square).	SMMA_LO_00531
K.G.B	Analyze, compare, create, and compose shapes.		
K.G.B.4	Analyze and compare two-dimensional and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/corners), and other attributes (e.g., having sides of equal length).	Identify the smaller or bigger rectangle.	SMMA_LO_00747
K.MP	Standards for Mathematical Practice		
K.MP.2	Reason abstractly and quantitatively.		

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	<p>Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent.</p> <p>Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.</p>	Use logical reasoning to identify the item that does not belong in a group.	SMMA_LO_01227
K.MP.3	Construct viable arguments and critique the reasoning of others.		
	<p>Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures.</p> <p>Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.</p>	Use logical reasoning to identify the item that does not belong in a group.	SMMA_LO_01227
K.MP.6	Attend to precision.		

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	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Use logical reasoning to identify the item that does not belong in a group.	SMMA_LO_01227
K.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Match patterns of geometric figures.	SMMA_LO_00539
		Extend a 1-1-2-2 pattern of geometric figures.	SMMA_LO_00522
		Extend a 1-2-1-2 pattern of geometric figures.	SMMA_LO_00520
		Extend a 1-2-1-2 pattern of pictures.	SMMA_LO_00519
		Extend a 1-1-2-2 pattern of pictures.	SMMA_LO_00521
K.MP.8	Look for and express regularity in repeated reasoning.		
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Match patterns of geometric figures.	SMMA_LO_00539
		Extend a 1-1-2-2 pattern of geometric figures.	SMMA_LO_00522
		Extend a 1-2-1-2 pattern of geometric figures.	SMMA_LO_00520
		Extend a 1-2-1-2 pattern of pictures.	SMMA_LO_00519
		Extend a 1-1-2-2 pattern of pictures.	SMMA_LO_00521

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 1	SuccessMaker Item Description	Item ID
1.OA	Operations and Algebraic Thinking		
1.OA.A	Represent and solve problems involving addition and subtraction.		
1.OA.A.1	Use addition and subtraction within 20 to solve word problems with unknowns in all positions (e.g., by using objects, drawings, and/or equations with a symbol for the unknown number to represent the problem).	Find the missing subtrahend in a subtraction number sentence (minuends 10 to 14).	SMMA_LO_01446
		Complete fact families with four facts (sums 3 to 10).	SMMA_LO_00322
		Find the missing minuend in a subtraction number sentence (minuends 0 to 9).	SMMA_LO_01440
		Find the missing addend in a number sentence (sums 10 to 18).	SMMA_LO_00048
		Find the missing subtrahend in a subtraction number sentence (minuends 11 to 19).	SMMA_LO_01464
		Find the missing subtrahend in a subtraction number sentence (minuends 0 to 9).	SMMA_LO_01432
		Find the missing minuend in a subtraction number sentence (minuends 15 to 18).	SMMA_LO_01455
		Find the missing subtrahend in a subtraction number sentence (minuends 15 to 18).	SMMA_LO_01449
		Identify the missing number (addend or sum) in an addition equation, for numbers 20 and less.	SMMA_LO_02010
		Solve a problem in context by finding a missing addend (sums 2 to 5).	SMMA_LO_01550
		Solve a problem in context by finding a missing addend (sums 2 to 5).	SMMA_LO_01546
		Find the missing addend in a number sentence. (sums 2 to 9)	SMMA_LO_00037
		Find the missing minuend in a subtraction number sentence (minuends 10 to 14).	SMMA_LO_01451
		Create a fact family (addition and subtraction).	SMMA_LO_01857
		Apply the Commutative Property of Addition as a strategy to add two numbers; use fact families as a strategy to subtract two numbers.	SMMA_LO_02021
		Find the missing minuend in a subtraction number sentence (minuends 11 to 19).	SMMA_LO_01468
		Identify the missing number (minuend, subtrahend, or difference) in a subtraction equation, for numbers 20 and less.	SMMA_LO_02014

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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/or equations with a symbol for the unknown number to represent the problem).	Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	SMMA_LO_01239
1.OA.B	Understand and apply properties of operations and the relationship between addition and subtraction.		
1.OA.B.4	Understand subtraction as an unknown-addend problem within 20 (e.g., subtract $10 - 8$ by finding the number that makes 10 when added to 8).	Solve a subtraction problem by finding the missing addend.	SMMA_LO_02023
1.OA.C	Add and subtract within 10.		
1.OA.C.5	Relate counting to addition and subtraction (e.g., by using counting on 2 to add 2).	Add a two-digit number to a one-digit number by counting (sums up to 18), given in words.	SMMA_LO_00039
1.OA.C.6	Fluently add and subtract within 10.	Solve an addition problem with three addends in context (sums 3 to 10).	SMMA_LO_01557
		Add two addends vertically (sums 10 to 18).	SMMA_LO_00041
		Solve an addition problem in context (different objects, sums 2 to 5).	SMMA_LO_01544
		Solve an addition problem with three addends in context (sums 3 to 10).	SMMA_LO_01549
		Solve a problem in context by finding a missing addend (sums 2 to 5).	SMMA_LO_01550
		Solve a problem in context by finding a missing addend (sums 2 to 5).	SMMA_LO_01546
		Solve a subtraction problem in context (minuends 2 to 5).	SMMA_LO_01545
		Write a number sentence for an addition problem (sums 2 to 10).	SMMA_LO_01230
		Solve an addition problem in context (same objects, sums 2 to 5).	SMMA_LO_01540
		Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	SMMA_LO_01239
		Act out the solution to an addition problem in context (three addends, sums 1 to 9).	SMMA_LO_01537
		Write a number sentence for an addition problem (sums 2 to 5).	SMMA_LO_01229
		Identify the picture that can be used to solve an addition or subtraction problem.	SMMA_LO_01255
1.OA.D	Work with addition and subtraction equations.		
1.OA.D.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? $6 + 1 = 6 - 1$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$).	Determine if equations involving addition and subtraction are true or false.	SMMA_LO_02024
1.NBT	Number and Operations in Base Ten		
1.NBT.A	Extend the counting sequence.		

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1.NBT.A.1	Count to 120 by 1's, 2's, and 10's starting at any number less than 100. In this range, read and write numerals and represent a number of objects with a written numeral.	Find a missing number in a sequence, counting by 10's (10 to 100, visual support).	SMMA_LO_00971
		Find a missing number in a sequence, counting by 1's (10 to 20).	SMMA_LO_00970
		Find a missing number in a sequence, counting by 1's (11 to 50).	SMMA_LO_00982
		Find a missing number in a sequence, counting by 10's (10 to 100).	SMMA_LO_00981
		Find a missing number in a sequence, counting by 1's (51 to 99).	SMMA_LO_00983
		Find a missing number in a sequence, counting by 1's (1 to 20).	SMMA_LO_00951
1.NBT.B	Understand place value.		
1.NBT.B.2	Understand that the two digits of a two-digit number represent groups of tens and ones. Understand the following as special cases:		
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).	Model multiples of 10 (from 10 to 90) with place value blocks.	SMMA_LO_02019
		Enter the number equal to 1 to 9 tens.	SMMA_LO_00974
		Enter the number of tens for a given multiple of ten (10 to 90).	SMMA_LO_00975
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 $<$.	Identify a two-digit number, model, or expression that has a different value.	SMMA_LO_00991
		Compare numbers using $<$ or $>$ symbols (1 to 19).	SMMA_LO_00325
1.NBT.C	Use place value understanding and properties of operations to add and subtract.		
1.NBT.C.4	Demonstrate understanding of addition within 100, connecting objects or drawings to strategies based on place value (including multiples of 10), properties of operations, and/or the relationship between addition and subtraction. Relate the strategy to a written form.	Subtract a number from 10 (subtrahends 1 to 9).	SMMA_LO_01424
1.NBT.C.6	Subtract multiples of 10 in the range of 10 to 90 (positive or zero differences), using objects 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 form.	Identify a picture that represents a subtraction problem (one or two-digit).	SMMA_LO_01244
		Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	SMMA_LO_01239
1.MD	Measurement and Data		

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1.MD.A	Measure lengths indirectly and by iterating length units.		
1.MD.A.1	Order three objects by length. Compare the lengths of two objects indirectly by using a third object.	Order three objects by length.	SMMA_LO_02147
		Identify the group of objects that is 1 to 5 nonstandard units long or tall.	SMMA_LO_00701
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.)	Identify an object given the height and width in nonstandard units.	SMMA_LO_00725
		Measure the length of an object (2 to 7 nonstandard units).	SMMA_LO_00777
		Count to find the height and width (2 to 5 nonstandard units).	SMMA_LO_00713
		Identify the group of objects that is 1 to 5 nonstandard units long or tall.	SMMA_LO_00701
		Count to find how long or tall (2 to 9 nonstandard units).	SMMA_LO_00705
		Find the total length of two objects (nonstandard units, sums 2 to 5).	SMMA_LO_00720
		Find the height (2 to 9 nonstandard units).	SMMA_LO_00710
		Find the distance between two objects (2 to 8 nonstandard units).	SMMA_LO_00732
1.MD.B	Work with time and money.		
1.MD.B.3a	Tell and write time in hours and half-hours using analog and digital clocks.	Tell time to the hour using digital and analog clocks.	SMMA_LO_00716
		Tell time to the hour using an analog clock.	SMMA_LO_00714
1.MD.B.3b	Identify coins by name and value (pennies, nickels, dimes and quarters).	Identify the coin equivalent to 5, 10, or 25 pennies.	SMMA_LO_00727
		Identify the coin worth 1, 5, 10, or 25 cents.	SMMA_LO_00702
1.G	Geometry		
1.G.A	Reason with shapes and their attributes.		
1.G.A.1	Distinguish between defining attributes (triangles are closed and 3 sided) versus non-defining attributes (color, orientation, overall size) for two-dimensional shapes; build and draw shapes that possess defining attributes.	Identify triangles or rectangles by name.	SMMA_LO_00546
		Identify a shape by two positive tests e.g. red, circle.	SMMA_LO_00565
		Identify circles or squares by name.	SMMA_LO_00544
		Identify triangles, squares, rectangles, and pentagons.	SMMA_LO_00550
		Identify the group with the greatest number of shapes of a given type (1 to 6).	SMMA_LO_00959
1.MP	Standards for Mathematical Practices		

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1.MP.1	Make sense of problems and persevere in solving them.		
	Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate. Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.	Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	SMMA_LO_01239
1.MP.2	Reason abstractly and quantitatively.		
	Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent. Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.	Determine if equations involving addition and subtraction are true or false.	SMMA_LO_02024
1.MP.3	Construct viable arguments and critique the reasoning of others.		

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	<p>Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.</p>	<p>Determine if equations involving addition and subtraction are true or false.</p>	<p>SMMA_LO_02024</p>
<p>1.MP.4</p>	<p>Model with mathematics.</p>		
	<p>Mathematically proficient students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. When given a problem in a contextual situation, they identify the mathematical elements of a situation and create a mathematical model that represents those mathematical elements and the relationships among them. Mathematically proficient students use their model to analyze the relationships and draw conclusions. They interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.</p>	<p>Identify a picture that represents a subtraction problem (one or two-digit).</p>	<p>SMMA_LO_01244</p>
		<p>Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).</p>	<p>SMMA_LO_01239</p>
<p>1.MP.5</p>	<p>Use appropriate tools strategically.</p>		

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	Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.	Select the appropriate ruler to measure vertical or horizontal lengths.	SMMA_LO_00812
1.MP.6	Attend to precision.		
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	SMMA_LO_01239
		Determine if equations involving addition and subtraction are true or false.	SMMA_LO_02024
1.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Extend a 1-1-2 or 1-2-2 pattern of congruent shapes.	SMMA_LO_00558
		Extend a 1-2-2 pattern of pictures.	SMMA_LO_00556
		Extend a 1-2-3 pattern of similar figures.	SMMA_LO_00560
1.MP.8	Look for and express regularity in repeated reasoning.		

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	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	SMMA_LO_01239

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
2.NBT	Number and Operations in Base Ten		
2.NBT.A	Understand place value.		
2.NBT.A.1	Understand that the three digits of a three-digit number represent groups of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones and also equals 70 tens and 6 ones). Understand the following as special cases:		
2.NBT.A.1.b	The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	Find a number equal to 1 to 9 hundreds.	SMMA_LO_01007
		Find the number of hundreds equivalent to a multiple of 100 (100 to 900).	SMMA_LO_01008
2.NBT.A.2	Count within 1000; skip count by 5's, 10's and 100's.	Identify the multiple of 5 that is closer to a number (25 to 94).	SMMA_LO_01006
		Find a missing number in a sequence, counting by 10's (two-digit, non multiples of 10).	SMMA_LO_00992
		Find a missing number in a sequence, counting up or down by 5's (two-digit).	SMMA_LO_01004
		Identify the multiple of 5 that is closest to a given number.	SMMA_LO_01005
		Find the missing number in a sequence, counting by 5's or 10's.	SMMA_LO_01231
		Find a missing number in a sequence, counting by 5's (5 to 50).	SMMA_LO_01003
2.NBT.B	Use place value understanding and properties of operations to add and subtract.		
2.NBT.B.5	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	Choose an operation to solve a problem with extra information; then solve (addition or subtraction, basic facts).	SMMA_LO_01247
		Solve an addition problem in context (two-digit addends, sums less than 100, no regrouping).	SMMA_LO_01556
		Identify and solve a number sentence for an addition problem in context (sums 2 to 9).	SMMA_LO_01555
		Solve an addition problem in context (extra information, sums to 50, no regrouping).	SMMA_LO_01567
		Solve a subtraction problem in context (two-digit minuends, one-digit subtrahends, no regrouping).	SMMA_LO_01560
		Identify and solve a number sentence for an addition problem in context (sums 2 to 9).	SMMA_LO_01553
		Solve a subtraction problem to find a person's age (minuends 1 to 99, subtrahends 1 to 9, no regrouping).	SMMA_LO_01563

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
		Identify the expression that represents a subtraction problem in context (minuends 2 to 5).	SMMA_LO_01559
		Use guess and check to solve an addition and subtraction problem (basic facts).	SMMA_LO_01240
		Solve a problem with extra information (addition).	SMMA_LO_01558
		Identify and solve a number sentence for a subtraction problem in context (minuends 2 to 5).	SMMA_LO_01568
2.NBT.B.6	Add up to three two-digit numbers using strategies based on place value and properties of operations.	Solve a problem in context by finding a missing addend (three addends, sums to 20).	SMMA_LO_01574
		Find the missing addend in a number sentence (three addends, sums 20 to 27, regrouping).	SMMA_LO_00082
		Add three multiples of 10 (student choice, sums 30 to 90).	SMMA_LO_00043
		Add three addends displayed horizontally (one-digit addends, sums 20 to 27).	SMMA_LO_00062
		Add three addends (student choice, one-digit and two-digit addends, sums 21 to 99, no regrouping).	SMMA_LO_00079
		Act out a problem to find the sum of three numbers (one-digit addends).	SMMA_LO_01249
		Add three addends (student choice, one- and two-digit addends, sums 30 to 98, regrouping ones).	SMMA_LO_00090
		Add three addends (student choice, one-digit addends, sums 20 to 27).	SMMA_LO_00069
2.NBT.B.7	Demonstrate understanding of addition and subtraction within 1000, connecting objects or drawings to strategies based on place value (including multiples of 10), properties of operations, and/or the relationship between addition and subtraction. Relate the strategy to a written form.	Choose an operation to solve a problem with extra information; then solve (addition or subtraction, basic facts).	SMMA_LO_01247
		Solve an addition problem in context (two-digit addends, sums less than 100, no regrouping).	SMMA_LO_01556
		Identify and solve a number sentence for an addition problem in context (sums 2 to 9).	SMMA_LO_01555
		Solve an addition problem in context (extra information, sums to 50, no regrouping).	SMMA_LO_01567
		Solve a subtraction problem in context (two-digit minuends, one-digit subtrahends, no regrouping).	SMMA_LO_01560
		Identify and solve a number sentence for an addition problem in context (sums 2 to 9).	SMMA_LO_01553
		Solve a subtraction problem to find a person's age (minuends 1 to 99, subtrahends 1 to 9, no regrouping).	SMMA_LO_01563

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
		Identify the expression that represents a subtraction problem in context (minuends 2 to 5).	SMMA_LO_01559
		Use guess and check to solve an addition and subtraction problem (basic facts).	SMMA_LO_01240
		Solve a problem with extra information (addition).	SMMA_LO_01558
		Identify and solve a number sentence for a subtraction problem in context (minuends 2 to 5).	SMMA_LO_01568
2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)	Explain how to solve an addition problem, either by using place value blocks or by rewriting the problem.	SMMA_LO_02012
		Explain how to solve a subtraction problem, either by using place value blocks or by rewriting the problem as an addition problem.	SMMA_LO_02013
2.MD	Measurement and Data		
2.MD.A	Measure and estimate lengths in standard units.		
2.MD.A.2	Measure the length of an object twice, using different standard length units for the two measurements; describe how the two measurements relate to the size of the unit chosen. Understand that depending on the size of the unit, the number of units for the same length varies.	Measure the length of an object in cm and inches; relate the two measurements to the sizes of the units.	SMMA_LO_02003
2.MD.A.3	Estimate lengths using units of inches, feet, centimeters, and meters.	Identify an object given the estimated height and width in customary units.	SMMA_LO_00728
		Identify the reasonable length of an object (inches, feet, and yards).	SMMA_LO_00780
2.MD.C	Work with time and money.		
2.MD.C.7	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	Set time to 5-minute intervals using digital and analog clocks.	SMMA_LO_00744
2.MD.D	Represent and interpret data.		
2.MD.D.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in the graph.	Read a pictograph (3 categories, 1 to 9 items per category).	SMMA_LO_01124
		Determine the most or the least from a horizontal or vertical pictograph (four to six items).	SMMA_LO_00135
		Read and interpret a horizontal or vertical pictograph (four to six items).	SMMA_LO_00138
		Read and interpret a horizontal or vertical pictograph (four to six items).	SMMA_LO_00131
2.G	Geometry		
2.G.A	Reason with shapes and their attributes.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
2.G.A.1	Identify and describe specified attributes of two-dimensional and three-dimensional shapes, according to the number and shape of faces, number of angles, and the number of sides and/or vertices. Draw two-dimensional shapes based on the specified attributes (e.g., triangles, quadrilaterals, pentagons, and hexagons).	Identify a shape with positive and negative tests.	SMMA_LO_00578
2.G.A.2	Partition a rectangle into rows and columns of same-size rectangles and count to find the total number of rectangles.	Count the number of equal parts in a fractional model (2 to 8 parts).	SMMA_LO_00402
2.G.A.3	Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, fourths, half of, third of, fourth of, and describe the whole as two halves, three thirds, or four fourths. Recognize that equal shares of identical wholes need not have the same shape.	Count the number of equal parts in a fractional model (2 to 8 parts).	SMMA_LO_00402
2.MP	Standards for Mathematical Practices		
2.MP.1	Make sense of problems and persevere in solving them.		
	Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate. Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.	Act out the solution to multi-step problem in context (addends, minuends 1 to 4).	SMMA_LO_01538
		Show the given amount of money in coins (25 to 90 cents in pennies, nickels, dimes, and quarters).	SMMA_LO_00778
		Show another way to represent an amount of money (10 to 24 cents in pennies, nickels, and dimes).	SMMA_LO_00745
		Act out the problem to find the sum (basic facts).	SMMA_LO_01241
		Make a picture to solve a two-step problem in context (addition and subtraction).	SMMA_LO_01551

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
		Act out a problem to find the sum of three numbers (one-digit addends).	SMMA_LO_01249
		Use guess and check to solve an addition and subtraction problem (basic facts).	SMMA_LO_01240
2.MP.2	Reason abstractly and quantitatively.		
	Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent. Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.	Explain how to solve an addition problem, either by using place value blocks or by rewriting the problem.	SMMA_LO_02012
		Explain how to solve a subtraction problem, either by using place value blocks or by rewriting the problem as an addition problem.	SMMA_LO_02013
		Use guess and check to solve an addition and subtraction problem (basic facts).	SMMA_LO_01240
2.MP.3	Construct viable arguments and critique the reasoning of others.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
	<p>Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.</p>	<p>Explain how to solve an addition problem, either by using place value blocks or by rewriting the problem.</p>	<p>SMMA_LO_02012</p>
		<p>Explain how to solve a subtraction problem, either by using place value blocks or by rewriting the problem as an addition problem.</p>	<p>SMMA_LO_02013</p>
<p>2.MP.5</p>	<p>Use appropriate tools strategically.</p>		
	<p>Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.</p>	<p>Read a thermometer to the nearest 10 degrees (Fahrenheit).</p>	<p>SMMA_LO_00768</p>
<p>2.MP.6</p>	<p>Attend to precision.</p>		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Explain how to solve an addition problem, either by using place value blocks or by rewriting the problem.	SMMA_LO_02012
		Act out the problem to find the sum (basic facts).	SMMA_LO_01241
		Make a picture to solve a two-step problem in context (addition and subtraction).	SMMA_LO_01551
		Use guess and check to solve an addition and subtraction problem (basic facts).	SMMA_LO_01240
2.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Find the missing two-digit number in a sequence of odd or even numbers.	SMMA_LO_01002
		Identify the missing geometric figure in a 1-2-1-2 pattern.	SMMA_LO_00591
		Extend a 1-2-3 pattern of geometric figures.	SMMA_LO_00585
2.MP.8	Look for and express regularity in repeated reasoning.		
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Find the missing two-digit number in a sequence of odd or even numbers.	SMMA_LO_01002
		Identify the missing geometric figure in a 1-2-1-2 pattern.	SMMA_LO_00591

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 2	SuccessMaker Item Description	Item ID
		Extend a 1-2-3 pattern of geometric figures.	SMMA_LO_00585

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
3.OA	Operations and Algebraic Thinking		
3.OA.A	Represent and solve problems involving whole number multiplication and division.		
3.OA.A.1	Interpret products of whole numbers as the total number of objects in equal groups (e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each).	Identify a number sentence that could be used to solve a multiplication problem.	SMMA_LO_01270
3.OA.B	Understand properties of multiplication and the relationship between multiplication and division.		
3.OA.B.5	Apply properties of operations as strategies to multiply and divide. Properties include commutative and associative properties of multiplication and the distributive property. (Students do not need to use the formal terms for these properties.)	Apply the Commutative Property of Multiplication as a strategy to multiply and divide whole numbers.	SMMA_LO_02036
		Apply the Associative Property of Multiplication as a strategy to multiply whole numbers.	SMMA_LO_02037
3.OA.B.6	Understand division as an unknown-factor problem (e.g., find $32 \div 8$ by finding the number that makes 32 when multiplied by 8).	Represent a division problem as an unknown-factor problem; then find the missing factor.	SMMA_LO_02039
3.OA.C	Multiply and divide within 100.		
3.OA.C.7	Fluently multiply and divide within 100. By the end of Grade 3, know from memory all multiplication products through 10×10 and division quotients when both the quotient and divisor are less than or equal to 10.	Multiply two one-digit numbers (displayed horizontally (products 1×6 to 5×9).	SMMA_LO_00859
		Find the missing factor (products to 5×5).	SMMA_LO_00856
		Find the missing factor (products 1×6 to 5×9).	SMMA_LO_00860
		Divide (combinations 6×6 to 9×9 , no remainder).	SMMA_LO_00284
		Identify a picture that represents a division problem (math facts).	SMMA_LO_01245
		Multiply two one-digit numbers displayed horizontally (products 6×6 to 9×9).	SMMA_LO_00868
		Multiply two one-digit numbers (products 1×6 to 5×9).	SMMA_LO_00863
		Identify a picture that represents a multiplication problem (basic facts).	SMMA_LO_01246
		Multiply whole numbers (products to 5×5).	SMMA_LO_00855
		Make a picture to solve a multiplication problem (basic facts).	SMMA_LO_01237
		Multiply two one-digit numbers (products 6×1 to 9×5).	SMMA_LO_00857
		Find the missing factor (products 1×6 to 9×5).	SMMA_LO_00864

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
		Divide using basic facts (combinations 2 x 6 to 9 x 5).	SMMA_LO_00282
		Find the missing factor (products to 5 x 5).	SMMA_LO_00858
		Make a picture to solve a division problem (math facts).	SMMA_LO_01238
		Complete fact families with four facts (products 2 x 3 to 8 x 9).	SMMA_LO_00344
		Make a picture to solve a quotitive division problem (dividends to 20).	SMMA_LO_01565
		Multiply two one-digit numbers (products 1 x 2 to 5 x 5).	SMMA_LO_00861
		Multiply two one-digit numbers (products 6 x 2 to 9 x 5).	SMMA_LO_00865
		Find the missing factor (products 6 x 6 to 9 x 9).	SMMA_LO_00873
		Make a picture to solve a partitive division problem (dividends to 20).	SMMA_LO_01564
		Find the missing factor (products 6 x 1 to 9 x 5).	SMMA_LO_00866
		Find the missing factor (products 6 x 6 to 9 x 9).	SMMA_LO_00877
		Multiply two one-digit numbers (products 6 x 6 to 9 x 9).	SMMA_LO_00867
		Find the missing factor (products 1 x 6 to 5 x 9).	SMMA_LO_00862
		Divide using basic facts (combinations to 5 x 5).	SMMA_LO_00280
3.OA.D	Solve problems involving the four operations, and identify and explain patterns in arithmetic.		
3.OA.D.10	When solving problems, assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Identify the reasonable weight of an object (ounces, pounds, and tons).	SMMA_LO_00787
		Identify the most reasonable quantity for a context (order of magnitude differs).	SMMA_LO_01586
		Determine the reasonableness of a sum or difference (two- and three-digit numbers).	SMMA_LO_01259
3.NBT	Number and Operations in Base Ten		
3.NBT.A	Use place value understanding and properties of operations to perform multi-digit arithmetic.		
3.NBT.A.1	Use place value understanding to round whole numbers to the nearest 10 or 100.	Round a two-digit number to the nearest ten.	SMMA_LO_01028
		Round a three-digit number to the nearest hundred.	SMMA_LO_01651
		Identify the best estimate for a sum of two numbers (two-digit addends, round to the nearest 10).	SMMA_LO_01052
		Estimate the sum by rounding to the nearest 10 (two-digit addends).	SMMA_LO_01615
		Round a three-digit number to the nearest hundred.	SMMA_LO_01036

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
		Round a three-digit number to the nearest hundred.	SMMA_LO_01652
		Estimate the sum or difference in a money problem by rounding to the nearest 10 (two-digit sums and differences).	SMMA_LO_01580
		Round two-digit numbers to the nearest ten.	SMMA_LO_01647
		Round a three-digit number to the nearest hundred.	SMMA_LO_01650
		Round a two-digit number to the nearest ten (hundreds chart).	SMMA_LO_01648
		Round a two-digit number to the nearest ten.	SMMA_LO_01649
3.NF	Number and Operations—Fractions		
3.NF.A	Understand fractions as numbers.		
3.NF.A.1	Understand a fraction ($1/b$) as the quantity formed by one part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.	Identify a fraction representing the shaded part (halves to eighths).	SMMA_LO_00421
		Enter the fraction representing the shaded amount (halves to eighths).	SMMA_LO_00422
		Count the fractional parts and total number of parts in a set (halves, thirds, fourths).	SMMA_LO_00412
		Model a fraction a/b by filling in a out of b sections in a fraction model.	SMMA_LO_02034
		Identify the figure showing a fraction of a region shaded (halves to eighths).	SMMA_LO_00420
3.NF.A.2	Understand a fraction as a number on the number line; represent fractions on a number line diagram.		
3.NF.A.2.b	Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Understand that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line including values greater than 1.	Represent a unit fraction $1/b$ by partitioning a number line and then finding $1/b$ on it.	SMMA_LO_02148
3.NF.A.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.		
3.NF.A.3.c	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	Find a fraction equal to 1 (halves to eighths).	SMMA_LO_00427
3.MD	Measurement and Data		
3.MD.A	Solve problems involving measurement.		
3.MD.A.1a	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 (e.g., representing the problem on a number line diagram).	Solve a problem by identifying the time 1 to 2 hours after a given time (not crossing 12 o'clock).	SMMA_LO_01547
		Show time to the minute using digital and analog clocks.	SMMA_LO_00771

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
		Set the digital clock to match the time on the analog clock to the exact minute.	SMMA_LO_01670
3.MD.A.1b	Solve word problems involving money through \$20.00, using symbols \$, €, ¢.	Solve an addition problem by finding the total cost of two items (prices expressed as decimals, total < \$0.50, no regrouping).	SMMA_LO_00181
		Estimate the sum or difference in a money problem by rounding to the nearest 10 (two-digit sums and differences).	SMMA_LO_01580
		Make a picture to solve a multiplication problem involving total cost (2 to 5 items, 5, 10, or 15 cents each).	SMMA_LO_01584
3.MD.A.2	Measure and estimate liquid volumes and masses of objects using metric units. (Excludes compound units such as cm ³ and finding the geometric volume of a container.) Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units. Excludes multiplicative comparison problems (problems involving notions of "times as much").	Read weights from a chart; choose two weights that equal a given total (sums to 1,500).	SMMA_LO_01301
3.MD.C	Geometric measurement: Understand concepts of area and perimeter.		
3.MD.C.5	Understand area as an attribute of plane figures and understand concepts of area measurement.		
3.MD.C.5.a	A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.	Identify a unit square and what attribute it is used to measure.	SMMA_LO_02027
3.MD.C.5.b	A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.	Identify a unit square and what attribute it is used to measure.	SMMA_LO_02027
3.MD.C.6	Measure areas by counting unit squares (e.g., square cm, square m, square in, square ft, and improvised units).	Identify a unit square and what attribute it is used to measure.	SMMA_LO_02027
		Find the area of a plane figure made up of square units and halves of square units.	SMMA_LO_02028
		Count squares to find the area (2 to 8 units).	SMMA_LO_00706
		Count squares and half squares to find the area of a figure in square centimeters.	SMMA_LO_00783
3.MD.C.7	Relate area to the operations of multiplication and addition.		
3.MD.C.7.a	Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	Tile a rectangle to find its area; represent the area of the rectangle in two different ways (length times width and the sum of the areas of two smaller rectangles).	SMMA_LO_02031

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
		Multiply side lengths to find the area of a rectangle in a real-world context; use area to represent a whole-number product by arranging tiles in a rectangle.	SMMA_LO_02030
		Find the area of a rectangle by tiling it; complete an equation to show that the area is the same as would be found by multiplying the side lengths.	SMMA_LO_02029
3.MD.C.7.b	Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	Find the area of a rectangle (36 to 144 customary or metric square units).	SMMA_LO_00173
		Multiply side lengths to find the area of a rectangle in a real-world context; use area to represent a whole-number product by arranging tiles in a rectangle.	SMMA_LO_02030
		Find the area of a rectangle (5 to 25 square centimeters).	SMMA_LO_00773
3.MD.C.7.d	Understand that rectilinear figures can be decomposed into non-overlapping rectangles and that the sum of the areas of these rectangles is identical to the area of the original rectilinear figure. Apply this technique to solve problems in real-world contexts.	Tile a rectangle to find its area; represent the area of the rectangle in two different ways (length times width and the sum of the areas of two smaller rectangles).	SMMA_LO_02031
		Identify and solve an expression that represents a multiplication problem in context (model shown, products to 32).	SMMA_LO_01570
		Solve a multiplication problem in context (repeated addition feedback, products 2 x 2 to 5 x 5).	SMMA_LO_01578
		Find the sum of the areas of two figures (sums 3 to 8, nonstandard units).	SMMA_LO_00752
		Solve an addition problem in context (four addends, sums 0 to 25).	SMMA_LO_01587
		Solve a subtraction problem in context (extra information, minuends 2 to 99, no regrouping).	SMMA_LO_01581
		Solve a multiplication problem in context with extra information.	SMMA_LO_01589
		Find the area of a rectilinear figure in a context by decomposing it into two rectangles.	SMMA_LO_02032
		Solve a problem in context that involves finding the difference of 2 three-digit numbers.	SMMA_LO_01610
3.G	Geometry		
3.G.A	Reason with shapes and their attributes.		
3.G.A.2	Partition shapes into b parts with equal areas. Express the area of each part as a unit fraction $1/b$ of the whole. (Grade 3 expectations are limited to fractions with denominators $b = 2, 3, 4, 6, 8$.)	Partition shapes into equal parts.	SMMA_LO_02000

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
3.MP	Standards for Mathematical Practices		
3.MP.1	Make sense of problems and persevere in solving them.		
	Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate. Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.	Identify the reasonable weight of an object (ounces, pounds, and tons).	SMMA_LO_00787
		Work backwards to solve a problem with a missing number.	SMMA_LO_01266
		Determine the reasonableness of a sum or difference (two- and three-digit numbers).	SMMA_LO_01259
3.MP.2	Reason abstractly and quantitatively.		
	Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent. Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.	Work backwards to solve a problem with a missing number.	SMMA_LO_01266
3.MP.3	Construct viable arguments and critique the reasoning of others.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
	<p>Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.</p>	<p>Work backwards to solve a problem with a missing number.</p>	<p>SMMA_LO_01266</p>
<p>3.MP.4</p>	<p>Model with mathematics.</p>		
	<p>Mathematically proficient students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. When given a problem in a contextual situation, they identify the mathematical elements of a situation and create a mathematical model that represents those mathematical elements and the relationships among them. Mathematically proficient students use their model to analyze the relationships and draw conclusions. They interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.</p>	<p>Identify the number of dollars and dimes that represent a given amount (\$1.10 to \$3.50).</p>	<p>SMMA_LO_00180</p>
<p>3.MP.5</p>	<p>Use appropriate tools strategically.</p>		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
	Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.	Identify congruent figures on a geoboard.	SMMA_LO_00606
		Solve a problem by identifying the time 1 to 2 hours after a given time (not crossing 12 o'clock).	SMMA_LO_01547
3.MP.6	Attend to precision.		
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Describe the relationship between two sets of numbers in a relation or function using multiplication, addition, or subtraction.	SMMA_LO_01653
		Describe the relationship between two sets of numbers in a relation or function using multiplication (factors 2 - 5).	SMMA_LO_01655
		Describe the relationship between two sets of numbers in a relation or function using subtraction (minuends 30 to 50, subtrahends 2 to 5).	SMMA_LO_01654
3.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Identify the missing picture in a 1-2-3-1-2-3 pattern.	SMMA_LO_00607
3.MP.8	Look for and express regularity in repeated reasoning.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 3	SuccessMaker Item Description	Item ID
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Identify the reasonable weight of an object (ounces, pounds, and tons).	SMMA_LO_00787
		Identify the missing picture in a 1-2-3-1-2-3 pattern.	SMMA_LO_00607

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
4.OA	Operations and Algebraic Thinking		
4.OA.A	Use the four operations with whole numbers to solve problems.		
4.OA.A.1	Represent verbal statements of multiplicative comparisons as multiplication equations. Interpret a multiplication equation as a comparison (e.g., 35 is the number of objects in 5 groups, each containing 7 objects, and is also the number of objects in 7 groups, each containing 5 objects).	Interpret a multiplication equation by writing a comparison statement.	SMMA_LO_02025
		Use a model to represents a word problem involving multiplicative comparison. Then, use an equation to represent the solution to the word problem.	SMMA_LO_02009
		Translate a verbal statement of a multiplicative comparison into a multiplication equation.	SMMA_LO_02008
4.OA.A.2	Multiply or divide within 1000 to solve word problems involving multiplicative comparison (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison).	Use a model to represents a word problem involving multiplicative comparison. Then, use an equation to represent the solution to the word problem.	SMMA_LO_02009
4.OA.B	Gain familiarity with factors and multiples.		
4.OA.B.4	Find all factor pairs for a whole number in the range 1 to 100 and understand that a whole number is a multiple of each of its factors.	Find the factors of a number and determine if the number is prime or composite (3 to 30).	SMMA_LO_01073
		Identify the number that is divisible by a given factor (numbers 2 to 81, factors 2 to 9).	SMMA_LO_01066
		Determine three factors of a given number.	SMMA_LO_01107
		Identify numbers that are multiples of a given number.	SMMA_LO_01069
		Identify the complete set of factors for a number (2 to 25).	SMMA_LO_01071
4.OA.C	Generate and analyze patterns.		
4.OA.C.6	When solving problems, assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Identify the most reasonable answer to a division problem involving money.	SMMA_LO_01279
		Identify the most reasonable answer to a multiplication problem involving money.	SMMA_LO_01278
		Estimate the total cost of four items by rounding to the nearest dollar (sums to \$15.00).	SMMA_LO_01591
		Estimate the difference of 2 four-digit numbers by rounding each to the nearest thousand.	SMMA_LO_01614

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
		Estimate the difference by rounding to the nearest dollar (minuends \$5.00 to \$20.00, subtrahends \$3.00 to \$15.00).	SMMA_LO_01669
		Estimate the product by rounding the second factor. (two-digit number to the nearest 10)	SMMA_LO_01603
		Estimate the sum by rounding to the nearest hundred (three-digit addends).	SMMA_LO_01675
		Estimate the sum by rounding to the nearest hundred (three-digit addends).	SMMA_LO_01621
		Estimate the sum, difference, product or quotient to solve a problem in context (round to the nearest thousand).	SMMA_LO_01109
4.NBT	Number and Operations in Base Ten		
4.NBT.A	Generalize place value understanding for multi-digit whole numbers.		
4.NBT.A.2	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Identify a set of numbers between two numbers, or less than or greater than a given number (101 to 999).	SMMA_LO_01068
		Compare two whole numbers (three to seven-digit numbers).	SMMA_LO_01711
4.NBT.A.3	Use place value understanding to round multi-digit whole numbers to any place.	Round four- to five-digit numbers in context (to the nearest thousand).	SMMA_LO_01106
		Round a three- to five-digit number to the nearest hundred.	SMMA_LO_01081
4.NBT.B	Use place value understanding and properties of operations to perform multi-digit arithmetic.		
4.NBT.B.5	Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Multiply a two-digit number by a one-digit number (student choice, products 10×6 to 15×9).	SMMA_LO_00874
		Multiply a 1-digit number by a 2-digit number (products 12×6 to 19×9).	SMMA_LO_00896
		Multiply a two-digit number by a one-digit number (student choice, products 21×2 to 99×9).	SMMA_LO_00880
		Use partial sums and arrays to solve a two-digit by a one-digit multiplication problem.	SMMA_LO_01716
		Multiply a one-digit number by a two-digit number (products 2×12 to 9×12).	SMMA_LO_00875
		Multiply a 1-digit number by a 2-digit number (products 13×1 to 19×5).	SMMA_LO_00894
		Multiply a two-digit number by a one-digit number (student choice, products 10×2 to 15×5).	SMMA_LO_00870

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
		Solve a multiplication problem in context (one-, two-, and three-digit factors).	SMMA_LO_01604
		Multiply a two-digit number by a one-digit number (student choice, products 16 x 2 to 19 x 5).	SMMA_LO_00872
		Multiply a two-digit number by a one-digit number (products 10 x 2 to 12 x 12).	SMMA_LO_00871
		Multiply a two-digit number by a one-digit number (student choice, vertical, products 10 x 1 to 12 x 4).	SMMA_LO_00869
		Multiply a two-digit number by a one-digit number (student choice, products 16 x 6 to 19 x 9).	SMMA_LO_00876
4.NBT.B.6	Demonstrate understanding of division by finding whole-number quotients and remainders with up to four-digit dividends and one-digit divisors.	Divide using the long division algorithm (one-digit divisor, remainder).	SMMA_LO_00292
4.NF	Number and Operations—Fractions		
4.NF.A	Extend understanding of fraction equivalence and ordering.		
4.NF.A.1	Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to understand and generate equivalent fractions.	Determine addition expressions that are equivalent to a given fraction.	SMMA_LO_02146
4.NF.B	Apply and extend previous understanding of multiplication to multiply a whole number by a fraction.		
4.NF.B.3	Understand a fraction a/b with $a > 1$ as a sum of unit fractions ($1/b$).		
4.NF.B.3.d	Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators.	Use a model and an equation to solve word problems involving the addition of fractions with like denominators.	SMMA_LO_02004
		Add fractions with like denominators (no simplifying).	SMMA_LO_01709
		Using models, subtract fractions, no simplifying (like denominators, halves to eighths).	SMMA_LO_00442
		Use a model and an equation to solve word problems involving the subtraction of fractions with like denominators.	SMMA_LO_02016
		Using models, add fractions, no simplifying (like denominators, thirds to eighths).	SMMA_LO_00441
4.NF.B.4	Build fractions from unit fractions.		
4.NF.B.4.b	Understand a multiple of a/b as a multiple of a unit fraction $1/b$, and use this understanding to multiply a whole number by a fraction. In general, $n \times a/b = n \times a/b$.	Use fraction models to rewrite the product of a whole number and a fraction as the product of a whole number and a unit fraction. Then, find the product.	SMMA_LO_02006

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
		Use fraction models to relate a fraction to a whole number times a unit fraction. Then, write an equation for this relationship.	SMMA_LO_02005
4.NF.B.4.c	Solve word problems involving multiplication of a whole number by a fraction.	Use fraction models to rewrite the product of a whole number and a fraction as the product of a whole number and a unit fraction. Then, find the product.	SMMA_LO_02006
		Use fraction models to relate a fraction to a whole number times a unit fraction. Then, write an equation for this relationship.	SMMA_LO_02005
4.NF.C	Understand decimal notation for fractions, and compare decimal fractions.		
4.NF.C.5	Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 (tenths) and 100 (hundredths). (Note: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators, in general, is not a requirement at this grade.)	Express a fraction with denominator 10 as an equivalent fraction with denominator 100. Then, add that fraction to another fraction with denominator 100.	SMMA_LO_02007
4.NF.C.6	Use decimal notation for fractions with denominators 10 (tenths) or 100 (hundredths), and locate these decimals on a number line.	Find the missing decimal number on a number line (1.0 to 9.89).	SMMA_LO_00215
		Find the missing decimal number on a number line (tenths, 0.1 to 0.9).	SMMA_LO_00188
4.MD	Measurement and Data		
4.MD.A	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.		
4.MD.A.2	Use the four operations to solve word problems and problems in real-world context involving distances, intervals of time (hr, min, sec), liquid volumes, masses of objects, and money, including decimals and problems involving fractions with like denominators, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using a variety of representations, including number lines that feature a measurement scale.	Identify the most reasonable answer to a division problem involving money.	SMMA_LO_01279
		Estimate the distance by rounding ($d = rt$).	SMMA_LO_01606
		Solve a division problem about money with extra information (round quotient to the nearest whole number).	SMMA_LO_01585
		Identify the most reasonable answer to a multiplication problem involving money.	SMMA_LO_01278

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
		Estimate the total cost of four items by rounding to the nearest dollar (sums to \$15.00).	SMMA_LO_01591
		Estimate the difference by rounding to the nearest dollar (minuends \$5.00 to \$20.00, subtrahends \$3.00 to \$15.00).	SMMA_LO_01669
4.MD.B	Represent and interpret data.		
4.MD.B.4	Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots.	Use a model and an equation to solve word problems involving the addition of fractions with like denominators.	SMMA_LO_02004
		Identify the most frequent value (mode) using a line plot.	SMMA_LO_01164
4.MD.C	Geometric measurement: Understand concepts of angle and measure angles.		
4.MD.C.6	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Use a protractor to measure an angle.	SMMA_LO_00631
		Select the appropriate protractor to measure an angle.	SMMA_LO_00644
4.G	Geometry		
4.G.A	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.		
4.G.A.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Draw a line segment using a ruler (to $\frac{1}{4}$ inch and 0.5 cm).	SMMA_LO_00800
		Identify parallel and perpendicular streets on a map.	SMMA_LO_00619
4.G.A.2	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size (e.g., understand right triangles as a category, and identify right triangles).	Identify right, acute, and obtuse angles in polygons.	SMMA_LO_00630
4.G.A.3	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	Draw a vertical or horizontal line of symmetry.	SMMA_LO_00608
		Identify the horizontal line of symmetry.	SMMA_LO_00597

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
		Identify the vertical line of symmetry.	SMMA_LO_00595
4.MP	Standards for Mathematical Practices		
4.MP.1	Make sense of problems and persevere in solving them.		
	Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate. Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.	Work backward to solve a two-step problem.	SMMA_LO_01288
		Choose a method to solve a two-step problem.	SMMA_LO_01289
		Solve a division problem about money with extra information (round quotient to the nearest whole number).	SMMA_LO_01585
		Identify the expression that represents a division problem in context; then solve the problem (dividends 12 to 81).	SMMA_LO_01605
		Identify the best estimate for a sum using data in a table (three- and four-digit addends).	SMMA_LO_01620
4.MP.2	Reason abstractly and quantitatively.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
	<p>Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent.</p> <p>Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.</p>	Determine the arrangements that can be made with a group of two and a group of three items.	SMMA_LO_01718
		Determine the number of arrangements that can be made from two groups with two items.	SMMA_LO_01717
		Use logical reasoning to complete an addition puzzle with two three-digit addends.	SMMA_LO_01261
4.MP.3	Construct viable arguments and critique the reasoning of others.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
	<p>Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.</p>	<p>Determine the arrangements that can be made with a group of two and a group of three items.</p>	<p>SMMA_LO_01718</p>
		<p>Determine the number of arrangements that can be made from two groups with two items.</p>	<p>SMMA_LO_01717</p>
		<p>Use logical reasoning to complete an addition puzzle with two three-digit addends.</p>	<p>SMMA_LO_01261</p>
<p>4.MP.4</p>	<p>Model with mathematics.</p>		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
	<p>Mathematically proficient students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. When given a problem in a contextual situation, they identify the mathematical elements of a situation and create a mathematical model that represents those mathematical elements and the relationships among them. Mathematically proficient students use their model to analyze the relationships and draw conclusions. They interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.</p>	<p>Use a model to represents a word problem involving multiplicative comparison. Then, use an equation to represent the solution to the word problem.</p>	SMMA_LO_02009
		<p>Identify the expression that represents a division problem in context; then solve the problem (dividends 12 to 81).</p>	SMMA_LO_01605
4.MP.5	Use appropriate tools strategically.		
	<p>Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.</p>	<p>Identify all the towns with temperatures below 32 degrees Fahrenheit on a weather map.</p>	SMMA_LO_01311
		<p>Identify a figure with a given area on a geoboard (4 to 15 square units).</p>	SMMA_LO_00802
		<p>Use a protractor to measure an angle.</p>	SMMA_LO_00631
		<p>Graph and interpret rainfall data in a chart.</p>	SMMA_LO_01328
		<p>Select the appropriate protractor to measure an angle.</p>	SMMA_LO_00644
4.MP.6	Attend to precision.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Read and interpret a horizontal or vertical pictograph (six items).	SMMA_LO_00150
		Read and interpret a table.	SMMA_LO_01695
		Graph and interpret rainfall data in a chart.	SMMA_LO_01328
4.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Identify the one-step rule in the relation or function (addition and subtraction).	SMMA_LO_01722
		Look for a pattern to solve a problem.	SMMA_LO_01276
		Extend a geometric pattern.	SMMA_LO_01691
4.MP.8	Look for and express regularity in repeated reasoning.		
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Identify the most reasonable answer to a division problem involving money.	SMMA_LO_01279
		Look for a pattern to solve a problem.	SMMA_LO_01276
		Solve a division problem about money with extra information (round quotient to the nearest whole number).	SMMA_LO_01585
		Identify the most reasonable answer to a multiplication problem involving money.	SMMA_LO_01278
		Extend a geometric pattern.	SMMA_LO_01691

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 4	SuccessMaker Item Description	Item ID
		Identify the best estimate for a sum using data in a table (three- and four-digit addends).	SMMA_LO_01620

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
5.OA	Operations and Algebraic Thinking		
5.OA.B	Analyze patterns and relationships.		
5.OA.B.4	Understand primes have only two factors and decompose numbers into prime factors.	Using a factor tree, find the prime factors of a number (2 to 32).	SMMA_LO_01087
5.NBT	Number and Operations in Base Ten		
5.NBT.A	Understand the place value system.		
5.NBT.A.1	Apply concepts of place value, multiplication, and division to understand that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	Identify the place and the value of a digit in a number; for that value, identify the number 10 times as much and the number 1/10 as much.	SMMA_LO_02045
5.NBT.A.2	Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.	Identify the location of the decimal point of the product of two decimals (factors, tenths to hundredths).	SMMA_LO_00222
		Multiply one- to five-digit whole numbers by powers of ten (10 to 100,000).	SMMA_LO_01078
		Explain patterns in the number of zeroes of the product and in the placement of the decimal point when multiplying a number by powers of ten.	SMMA_LO_02046
		Multiply decimals by 10, 100, or 1000.	SMMA_LO_00235
5.NBT.A.3	Read, write, and compare decimals to thousandths.		
5.NBT.A.3.a	Read and write decimals to thousandths using base-ten numerals, number names, and expanded form.	Match a decimal number to its word name (to thousandths).	SMMA_LO_00227
		Match the word name with the decimal number (0.10 to 9.99).	SMMA_LO_00204
5.NBT.A.4	Use place value understanding to round decimals to any place.	Round a decimal to the nearest tenth, hundredth, or whole number.	SMMA_LO_00230
5.NF	Number and Operations—Fractions		
5.NF.A	Use equivalent fractions to add and subtract fractions.		
5.NF.A.2	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators by using a variety of representations, equations, and visual models to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers (e.g. recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$).	Estimate the difference of two fractions.	SMMA_LO_01707

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
5.NF.B	Use previous understandings of multiplication and division to multiply and divide fractions.		
5.NF.B.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number and a fraction by a fraction.		
5.NF.B.4.b	Interpret the product of a fraction multiplied by a fraction $(a/b) \times (c/d)$. Use a visual fraction model and create a story context for this equation.	Model the multiplication of two fractions; complete an equation to show the product; interpret a real-world context that can be modeled by this equation.	SMMA_LO_02054
		Model multiplication of a whole number by a fraction; complete an equation to show the product; interpret a real-world context that can be modeled by this equation.	SMMA_LO_02048
		Model the division of a unit fraction by a nonzero whole number, and compute the quotient.	SMMA_LO_02052
5.NF.B.4.c	Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	Find the area of a rectangle with fractional side lengths in two ways: by multiplying its side lengths and by tiling it with smaller rectangles.	SMMA_LO_02049
5.NF.B.5	Interpret multiplication as scaling (resizing), by:		
5.NF.B.5.b	Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number; explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.	Find the missing numerator or denominator in an equivalent fraction (simplified fractions $1/2$ to $3/4$).	SMMA_LO_00451
		Find an equivalent fraction of a simplified fraction (simplified fractions $1/2$ to $8/9$).	SMMA_LO_00457
		Find the missing numerator or denominator in an equivalent fraction (simplified fractions $1/2$ to $7/8$).	SMMA_LO_00453
5.NF.B.6	Solve problems in real-world contexts involving multiplication of fractions, including mixed numbers, by using a variety of representations including equations and models.	Model a division word problem that results in a rational quotient; then express the word problem with an equation.	SMMA_LO_02047
		Determine the sale price of an item when the price is reduced by one-half, one-third, or one-fourth.	SMMA_LO_01285
5.NF.B.7	Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
5.NF.B.7.a	Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. Use the relationship between multiplication and division to justify conclusions.	Model the division of a unit fraction by a nonzero whole number, and compute the quotient.	SMMA_LO_02052
5.NF.B.7.c	Solve problems in real-world context involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, using a variety of representations.	Determine the sale price of an item when the price is reduced by one-half, one-third, or one-fourth.	SMMA_LO_01285
		Model the division of a unit fraction by a nonzero whole number, and compute the quotient.	SMMA_LO_02052
5.MD	Measurement and Data		
5.MD.C	Geometric measurement: Understand concepts of volume and relate volume to multiplication and to addition.		
5.MD.C.3	Recognize volume as an attribute of solid figures and understand concepts of volume measurement.		
5.MD.C.3.a	A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.	Identify a unit cube and what attribute it is used to measure.	SMMA_LO_02041
5.MD.C.3.b	A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.	Identify a unit cube and what attribute it is used to measure.	SMMA_LO_02041
5.MD.C.4	Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	Identify a unit cube and what attribute it is used to measure.	SMMA_LO_02041
		Find the volume of a prism by packing the prism with unit cubes.	SMMA_LO_02042
5.MD.C.5	Relate volume to the operations of multiplication and addition and solve mathematical problems and problems in real-world contexts involving volume.		
5.MD.C.5.a	Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes (e.g., to represent the associative property of multiplication).	Find the volume of a prism by packing the prism with unit cubes.	SMMA_LO_02042
		Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units).	SMMA_LO_00174

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
5.MD.C.5.b	Understand and use the formulas $V = l \times w \times h$ and $V = Bh$, where in this case B is the area of the base ($B = l \times w$), for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths to solve mathematical problems and problems in real-world contexts.	Compute the volume of right rectangular prisms using formulas.	SMMA_LO_02043
		Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units).	SMMA_LO_00174
5.MD.C.5.c	Understand volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms, applying this technique to solve mathematical problems and problems in real-world contexts.	Find the volume of a three-dimensional figure by decomposing that figure into two right rectangular prisms and then adding those prisms' volumes.	SMMA_LO_02044
5.G	Geometry		
5.G.A	Graph points on the coordinate plane to solve mathematical problems as well as problems in real-world context.		
5.G.A.2	Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	Graph a point on a coordinate grid (Quadrant I).	SMMA_LO_01735
5.MP	Standards for Mathematical Practices		
5.MP.1	Make sense of problems and persevere in solving them.		
	Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate. Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.	Identify the best estimate of a sum, difference, or product.	SMMA_LO_00231
		Identify the true statement about a relationship among quadrilaterals.	SMMA_LO_00656
		Identify the best estimate for a quotient (decimal divided by a whole number).	SMMA_LO_00238
		Determine the number of routes between two locations on a map.	SMMA_LO_01737

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
		Estimate the product of three factors (1,000 to 350,000).	SMMA_LO_01099
		Estimate the product by rounding each factor (a two-digit number by a three-digit number)	SMMA_LO_01622
		Find the missing information needed to solve a problem; then solve.	SMMA_LO_01293
5.MP.2	Reason abstractly and quantitatively.		
	<p>Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent.</p> <p>Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.</p>	Determine whether two to six segments divide a figure into congruent parts.	SMMA_LO_00634

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
5.MP.3	Construct viable arguments and critique the reasoning of others.		
	<p>Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.</p>	Determine whether two to six segments divide a figure into congruent parts.	SMMA_LO_00634
5.MP.4	Model with mathematics.		
	<p>Mathematically proficient students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. When given a problem in a contextual situation, they identify the mathematical elements of a situation and create a mathematical model that represents those mathematical elements and the relationships among them. Mathematically proficient students use their model to analyze the relationships and draw conclusions. They interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.</p>	Solve a problem in context by finding the average (mean) of three to seven numbers.	SMMA_LO_01619
		Determine the number of routes between two locations on a map.	SMMA_LO_01737
		Find the missing information needed to solve a problem; then solve.	SMMA_LO_01293

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
5.MP.5	Use appropriate tools strategically.		
	Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.	Use a protractor to measure an angle in a triangle or quadrilateral; then find the sum of all the angles in the figure.	SMMA_LO_00650
		Measure an angle using the appropriate protractor.	SMMA_LO_00646
		Use a protractor to measure an angle.	SMMA_LO_00636
5.MP.6	Attend to precision.		
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Create a line graph.	SMMA_LO_01771
		Complete sentences about bases, faces, edges, and vertices of geometric solids.	SMMA_LO_00652
5.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Generate a table of values given a rule.	SMMA_LO_01724
		Determine whether two to six segments divide a figure into congruent parts.	SMMA_LO_00634

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 5	SuccessMaker Item Description	Item ID
5.MP.8	Look for and express regularity in repeated reasoning.		
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Identify the best estimate of a sum, difference, or product.	SMMA_LO_00231
		Identify the true statement about a relationship among quadrilaterals.	SMMA_LO_00656
		Generate a table of values given a rule.	SMMA_LO_01724
		Identify the best estimate for a quotient (decimal divided by a whole number).	SMMA_LO_00238
		Identify the probable error in a multiplication calculation with decimals.	SMMA_LO_00250
		Estimate the product of three factors (1,000 to 350,000).	SMMA_LO_01099
		Estimate the product by rounding each factor (a two-digit number by a three-digit number)	SMMA_LO_01622

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
6.RP	Ratios and Proportional Relationships		
6.RP.A	Understand ratio concepts and use ratio reasoning to solve problems.		
6.RP.A.3	Use ratio and rate reasoning to solve mathematical problems and problems in real-world context (e.g., by reasoning about data collected from measurements, tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).		
6.RP.A.3.a	Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Complete a comparison statement based on the ratios in two tables.	SMMA_LO_02116
6.RP.A.3.b	Solve unit rate problems including those involving unit pricing and constant speed.	Find the number of hours worked given the hourly rate and total earned.	SMMA_LO_01625
6.RP.A.3.c	Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity). Solve percent problems with the unknown in all positions of the equation.	Determine the percent (100 total items).	SMMA_LO_01713
6.NS	The Number System		
6.NS.A	Apply and extend previous understanding of multiplication and division to divide fractions by fractions.		
6.NS.A.1	Interpret and compute quotients of fractions to solve mathematical problems and problems in real-world context involving division of fractions by fractions using visual fraction models and equations to represent the problem.	Divide a mixed number by a fraction; simplify if necessary.	SMMA_LO_01789
		Divide a fraction by a fraction; simplify if necessary.	SMMA_LO_01788
6.NS.B	Compute fluently with multi-digit numbers and find common factors and multiples.		
6.NS.B.2	Fluently divide multi-digit numbers using a standard algorithm.	Move the decimal point in the divisor and dividend in a long division problem.	SMMA_LO_00247
		Divide using the long division algorithm (one-digit divisor, remainder).	SMMA_LO_00295
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, remainder).	SMMA_LO_00298
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, remainder).	SMMA_LO_00297
		Divide using the long division algorithm (four-digit dividend, one-digit divisor, remainder).	SMMA_LO_00300
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, no remainder).	SMMA_LO_00296

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
		Move the decimal point in the divisor and dividend in a long division problem; then find the quotient.	SMMA_LO_00249
		Divide using the long division algorithm (three-digit number, two-digit divisor, remainder).	SMMA_LO_00304
6.NS.B.3	Fluently add, subtract, multiply, and divide multi-digit decimals using a standard algorithm for each operation.	Move the decimal point in the divisor and dividend in a long division problem.	SMMA_LO_00247
		Align the decimal numbers for a vertical subtraction problem; then solve (to thousandths).	SMMA_LO_00228
		Subtract decimals with regrouping (to ten-thousandths).	SMMA_LO_00243
		Subtract the decimal numbers provided on a data table.	SMMA_LO_01786
		Move the decimal point in the divisor and dividend in a long division problem; then find the quotient.	SMMA_LO_00249
		Align the decimal numbers in a vertical subtraction problem; then solve (decimals to thousandths).	SMMA_LO_00233
		Align the decimal numbers for a vertical addition problem; then solve (to thousandths).	SMMA_LO_00226
6.NS.C	Apply and extend previous understanding of numbers to the system of rational numbers.		
6.NS.C.6	Understand a rational number can be represented as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.		
6.NS.C.6.b	Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.	Given two points, describe how the points are related: reflected across the x-axis, reflected across the y-axis, or reflected across both axes.	SMMA_LO_02108
6.NS.C.7	Understand ordering and absolute value of rational numbers.		
6.NS.C.7.b	Write, interpret, and explain statements of order for rational numbers in real-world context.	Complete statements of order for rational numbers in real-world contexts.	SMMA_LO_02110
6.NS.C.8	Solve mathematical problems and problems in real-world context by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	Graph points on a coordinate plane based on a real-world context.	SMMA_LO_02112
6.EE	Expressions and Equations		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
6.EE.A	Apply and extend previous understanding of arithmetic to algebraic expressions.		
6.EE.A.1	Write and evaluate numerical expressions involving whole-number exponents.	Give the value of a number (1 to 10) raised to a power (1 to 5).	SMMA_LO_01098
6.EE.A.2	Write, read, and evaluate algebraic expressions.		
6.EE.A.2.a	Write expressions that record operations with numbers and variables.	Write expressions that record operations with numbers and variables.	SMMA_LO_02056
6.EE.A.2.b	Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, and coefficient); view one or more parts of an expression as a single entity.	Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient).	SMMA_LO_02057
6.EE.A.2.c	Evaluate expressions given specific values of their variables. Include expressions that arise from formulas used to solve mathematical problems and problems in real-world context. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).	Give the value of a number (1 to 10) raised to a power (1 to 5).	SMMA_LO_01098
		Evaluate an expression within a context (multiplication).	SMMA_LO_01740
		Evaluate an expression with variables using substitution and a value chart (addition, sums to 18).	SMMA_LO_01685
		Given the value for the variable, evaluate an addition expression (sums 4 to 12).	SMMA_LO_01683
		Evaluate the expression $mx + c$ or $mx - c$.	SMMA_LO_01739
6.EE.A.3	Apply the properties of operations to generate equivalent expressions.	Apply the properties of operations to generate equivalent expressions.	SMMA_LO_02059
6.EE.A.4	Identify when two expressions are equivalent.	Choose all expressions that are equivalent to a given expression.	SMMA_LO_02060
6.EE.B	Reason about and solve one-variable equations and inequalities.		
6.EE.B.5	Understand solving an equation or inequality as a process of reasoning to find the value(s) of the variables that make that equation or inequality true. Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	Apply the properties of operations to generate equivalent expressions.	SMMA_LO_02059
		Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	SMMA_LO_02061
6.EE.B.6	Use variables to represent numbers and write expressions when solving mathematical problems and problems in real-world context; understand that a variable can represent an unknown number or any number in a specified set.	Identify the one-step equation that is a translation of the written phrase within a context.	SMMA_LO_01813

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
6.EE.B.7	Solve mathematical problems and problems in real-world context by writing and solving equations of the form $x + p = q$, $x - p = q$, $px = q$, and $x/p = q$ for cases in which p , q and x are all non-negative rational numbers.	Solve for a in $a/b = c$.	SMMA_LO_01798
		Solve for a or b in $a \div b = c$ (combinations $2 \div 10$ to $5 \div 12$).	SMMA_LO_00359
		Solve for a or b in $a \div b = c$ (combinations $6 \div 10$ to $9 \div 12$).	SMMA_LO_00361
		Solve a one-step equation in context (addition, two-digit whole numbers).	SMMA_LO_01743
		Solve for a or b in $a \times b = x$ (products 2×10 to 12×12).	SMMA_LO_00363
		Solve for a or b in $a \div b = c$ (combinations $6 \div 20$ to $9 \div 90$, multiples of 10).	SMMA_LO_00365
		Solve for a or b in $a \times b = c$ (products from 0.02×0.13 to 0.09×0.19).	SMMA_LO_00376
		Solve a one-step equation in context (subtraction, two-digit whole numbers).	SMMA_LO_01744
		Solve for a or b in $a \times b = x$ (products 2×20 to 12×90 , multiples of 10).	SMMA_LO_00366
		Solve for a or b in $a + b = c$ (decimals to tenths, no regrouping).	SMMA_LO_00367
		Solve one-step equations (addition and subtraction, fractions).	SMMA_LO_01796
		Solve for x in $ax = c$ in steps (products 4×4 to 9×10).	SMMA_LO_00380
		Complete the steps to solve for a in $a \div b = c$ (combinations 4×4 to 9×10).	SMMA_LO_00381
		Solve a one-step equation (subtraction).	SMMA_LO_01688
		Solve for a or b in $a \div b = c$ (combinations $0.6 \div 0.6$ to $0.9 \div 0.9$).	SMMA_LO_00370
		Solve for a or b in $a \times b = c$ (products from 0.2×0.6 to 0.9×0.9).	SMMA_LO_00369
		Solve for a or b in $a - b = c$ (decimals to tenths, regrouping).	SMMA_LO_00368
		Solve a one-step equation in context (division, two-digit whole numbers).	SMMA_LO_01747
		Solve a one-step equation (division).	SMMA_LO_01692
		Solve for a in $a + b = c$ or $a - b = c$ in steps (whole number sums and differences 2 to 20).	SMMA_LO_00379
		Solve a one-step equation in context (division, two-digit whole numbers).	SMMA_LO_01745
		Solve for a or b in $a \times b = c$ (products 6×2 to 9×12).	SMMA_LO_00357
		Solve a one-step equation (multiplication).	SMMA_LO_01690
6.G	Geometry		
6.G.A	Solve mathematical problems and problems in real-world context involving area, surface area, and volume.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
6.G.A.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Understand and use the formula $V = B \cdot h$, where in this case, B is the area of the base ($B = l \times w$) to find volumes of right rectangular prisms with fractional edge lengths in mathematical problems and problems in real-world context.	Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00829
		Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00833
6.SP	Statistics and Probability		
6.SP.B	Summarize and describe distributions.		
6.SP.B.4	Display and interpret numerical data by creating plots on a number line including histograms, dot plots, and box plots.	Identify data sets that match the data represented in a given box-and-whiskers plot.	SMMA_LO_01202
		Identify box-and whiskers plot that matches a given set of data.	SMMA_LO_01201
		Find the five values (upper and lower extremes, median, and upper and lower quartiles) from a set of data that are needed to create a box-and-whiskers plot.	SMMA_LO_01199
6.SP.B.5	Summarize numerical data sets in relation to their context by:		
6.SP.B.5.c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	Determine a student's grade point average based on five grades.	SMMA_LO_00179
		Identify the median of a data set with an even number of items and the two middle values are equal.	SMMA_LO_01169
		Determine the median of a data set.	SMMA_LO_01726
		Find the five values (upper and lower extremes, median, and upper and lower quartiles) from a set of data that are needed to create a box-and-whiskers plot.	SMMA_LO_01199
		Find the average (mean) of 3 numbers.	SMMA_LO_00151
		Determine the median of a set of data.	SMMA_LO_01768
		Determine the mean of a data set.	SMMA_LO_01727
		Determine the average (mean), median, mode, and range.	SMMA_LO_01210
		Identify the median of a data set with an odd number of items.	SMMA_LO_01168
		Identify the median of a data set with an even number of items and the two middle values are not equal.	SMMA_LO_01170

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
6.MP	Standards for Mathematical Practices		
6.MP.1	Make sense of problems and persevere in solving them.		
	Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate. Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.	Complete an input/output table given a two-step rule; then plot the ordered pairs on coordinate grid.	SMMA_LO_01758
		Complete an input/output table given a one-step rule; then plot the ordered pairs on a coordinate grid.	SMMA_LO_01757
		Extend an iterative pattern.	SMMA_LO_01754
6.MP.2	Reason abstractly and quantitatively.		
	Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent. Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.	Choose all expressions that are equivalent to a given expression.	SMMA_LO_02060
6.MP.3	Construct viable arguments and critique the reasoning of others.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
	<p>Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.</p>	Extend an iterative pattern.	SMMA_LO_01754
6.MP.4	Model with mathematics.		
	<p>Mathematically proficient students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. When given a problem in a contextual situation, they identify the mathematical elements of a situation and create a mathematical model that represents those mathematical elements and the relationships among them. Mathematically proficient students use their model to analyze the relationships and draw conclusions. They interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.</p>	Compare rational numbers in real-world contexts.	SMMA_LO_02109
		Identify the one-step equation that is a translation of the written phrase within a context.	SMMA_LO_01813
6.MP.5	Use appropriate tools strategically.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
	Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.	Measure the amount of rainfall for the week; then complete the chart and determine the total amount of rainfall for the month.	SMMA_LO_01327
		Read the temperature on a thermometer to nearest degree (-10 to 10 degrees).	SMMA_LO_00804
6.MP.6	Attend to precision.		
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Complete a comparison statement based on the ratios in two tables.	SMMA_LO_02116
		Write expressions that record operations with numbers and variables.	SMMA_LO_02056
		Use positive and negative numbers together to represent quantities having opposite directions or values.	SMMA_LO_02066
		Express a number in expanded notation or determine the number from an expanded notation.	SMMA_LO_01097
		Write an inequality of the form $x > c$ or $x < c$ to represent a constraint in a real-world problem. Then represent the solution on a number line.	SMMA_LO_02065
		Write an inequality of the form $x > c$ or $x < c$ to represent a constraint in a real-world problem.	SMMA_LO_02064
6.MP.7	Look for and make use of structure.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Generate a table of values given a one-step rule.	SMMA_LO_01755
		Complete an input/output table given a two-step rule; then plot the ordered pairs on coordite grid.	SMMA_LO_01758
		Make a table and a graph when given a rule in the form $y = ax$ or $y = x + a$.	SMMA_LO_02139
		Identify an expression to describe the pattern generated by a table.	SMMA_LO_01742
		Complete a table given a two-step rule (single-digit whole numbers).	SMMA_LO_01750
		Identify a two-step expression to describe the pattern generated by a table (input = 1000).	SMMA_LO_01753
		Complete an input/output table given a one-step rule; then plot the ordered pairs on a coordinate grid.	SMMA_LO_01757
		Generate a table of values given a two-step rule.	SMMA_LO_01756
		Extend an iterative pattern.	SMMA_LO_01754
		Identify an expression to describe the pattern generated by a table.	SMMA_LO_01741
		Identify a two-step expression to describe the pattern generated by a table (input = 100).	SMMA_LO_01752
		Complete a table given a two-step rule (whole numbers).	SMMA_LO_01751
6.MP.8	Look for and express regularity in repeated reasoning.		
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Generate a table of values given a one-step rule.	SMMA_LO_01755
		Complete an input/output table given a two-step rule; then plot the ordered pairs on coordite grid.	SMMA_LO_01758

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 6	SuccessMaker Item Description	Item ID
		Make a table and a graph when given a rule in the form $y = ax$ or $y = x + a$.	SMMA_LO_02139
		Identify an expression to describe the pattern generated by a table.	SMMA_LO_01742
		Complete a table given a two-step rule (single-digit whole numbers).	SMMA_LO_01750
		Identify a two-step expression to describe the pattern generated by a table (input = 1000).	SMMA_LO_01753
		Complete an input/output table given a one-step rule; then plot the ordered pairs on a coordinate grid.	SMMA_LO_01757
		Generate a table of values given a two-step rule.	SMMA_LO_01756
		Extend an iterative pattern.	SMMA_LO_01754
		Identify an expression to describe the pattern generated by a table.	SMMA_LO_01741
		Identify a two-step expression to describe the pattern generated by a table (input = 100).	SMMA_LO_01752
		Complete a table given a two-step rule (whole numbers).	SMMA_LO_01751

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
7.RP	Ratios and Proportional Relationships		
7.RP.A	Analyze proportional relationships and use them to solve mathematical problems and problems in real-world context.		
7.RP.A.2	Recognize and represent proportional relationships between quantities.		
7.RP.A.2.b	Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	Identify the constant of proportionality given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02002
		Identify the unit rate given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02001
7.RP.A.2.d	Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.	Interpret the meaning of a point on the graph of a proportional relationship in terms of the situation; use this information to answer questions about the situation.	SMMA_LO_02089
7.RP.A.3	Use proportional relationships to solve multi-step ratio and percent problems (e.g., simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error).	Solve for a variable in the formula for simple interest (whole numbers and decimals).	SMMA_LO_01805
7.NS	The Number System		
7.NS.A	Apply and extend previous understanding of operations with fractions to add, subtract, multiply, and divide rational numbers except division by zero.		
7.NS.A.1	Add and subtract integers and other rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.		
7.NS.A.1.a	Describe situations in which opposite quantities combine to make 0.	Describe situations that can be represented by opposite quantities.	SMMA_LO_02086
7.NS.A.1.b	Understand $p + q$ as the number located a distance $ q $ from p , in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world context.	Find the sum of four integers when two are additive inverses (a, b, c , and d have absolute values 1 to 20).	SMMA_LO_00119
7.NS.A.1.c	Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world context.	Identify $-a - (-b)$ as equivalent to $-a + b$ (minuends and subtrahends -9 to 9).	SMMA_LO_01521
		Identify $a - b$ as equivalent to $a + (-b)$, where a and b are 1 to 20.	SMMA_LO_01514
		Identify $a - (-b)$ as equivalent to $a + b$ (minuends 1 to 10).	SMMA_LO_01517

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
		Evaluate the expression $-(-a)$, where a has values 1 to 99.	SMMA_LO_01518
		Identify $-a - b$ as equivalent to $-a + (-b)$ (minuends -20 to -1).	SMMA_LO_01515
7.NS.A.1.d	Apply properties of operations as strategies to add and subtract rational numbers.	Apply properties of operations to add two linear expressions.	SMMA_LO_02149
7.NS.A.2	Multiply and divide integers and other rational numbers.		
7.NS.A.2.b	Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world context.	Interpret quotients of rational numbers by describing real-world contexts.	SMMA_LO_02088
7.NS.A.2.c	Apply properties of operations as strategies to multiply and divide rational numbers.	Apply properties of operations to add two linear expressions.	SMMA_LO_02149
7.EE	Expressions and Equations		
7.EE.B	Solve mathematical problems and problems in real-world context using numerical and algebraic expressions and equations.		
7.EE.B.3	Solve multi-step mathematical problems and problems in real-world context posed with positive and negative rational numbers in any form. Convert between forms as appropriate and assess the reasonableness of answers.	Find the missing two-digit addend in a number sentence (sums are 0, missing addend is first).	SMMA_LO_00104
		Find the missing negative addend in a number sentence (sums 1 to 8).	SMMA_LO_00105
		Find the missing one-digit addend in a number sentence (positive or negative integers, sums are 0).	SMMA_LO_00102
		Find the missing subtrahend in a number sentence (minuends -9 to 0, differences -9 to 0).	SMMA_LO_01512
		Find the missing two-digit addend in a number sentence (sums are 0).	SMMA_LO_00103
		Find the missing subtrahend in a number sentence (minuends 0 to 10, subtrahends 2 to 11, negative differences).	SMMA_LO_01509
		Find the missing addend in a number sentence (sums -20 to 20).	SMMA_LO_00122
		Find the missing addend in a number sentence (three addends, -10 to 10).	SMMA_LO_00123
		Find the missing addend in a number sentence (missing addends -10 to 10, sums -20 to 20).	SMMA_LO_00110
7.EE.B.4	Use variables to represent quantities in mathematical problems and problems in real-world context, and construct simple equations and inequalities to solve problems.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
7.EE.B.4.a	Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.	Complete the steps to solve for x in $ax + b = c$ (x is from -9 to -1).	SMMA_LO_00392
		Complete the steps to solve for x in $ax + b = c$.	SMMA_LO_00383
		Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 2).	SMMA_LO_00393
		Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 9).	SMMA_LO_00394
		Solve for x in $ax + b = c$.	SMMA_LO_00384
7.EE.B.4.b	Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.	Write an inequality of the form $px + q > r$ or $px + q < r$ to represent a constraint in a real-world problem.	SMMA_LO_02083
		Solve an inequality of the form $px + q > r$ or $px + q < r$; then graph the solution on a number line.	SMMA_LO_02084
7.G	Geometry		
7.G.A	Draw, construct, and describe geometrical figures, and describe the relationships between them.		
7.G.A.1	Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Determine distances from scale drawings (inches to miles, cm to km).	SMMA_LO_00815
7.G.B	Solve mathematical problems and problems in real-world context involving angle measure, area, surface area, and volume.		
7.G.B.5	Use facts about supplementary, complementary, vertical, and adjacent angles in multi-step problems to write and solve simple equations for an unknown angle in a figure.	Find the measure of the missing angle in a diagram.	SMMA_LO_00674
7.SP	Statistics and Probability		
7.SP.C	Investigate chance processes and develop, use and evaluate probability models.		
7.SP.C.5	Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	Create a set of colored balls whose contents are specified by whether it is certain, possible, or impossible to select a particular color.	SMMA_LO_01153

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
		Within the context of selecting without replacement from a cup containing three balls, each of a different color, label a given event prior to each selection as certain, possible, or impossible.	SMMA_LO_01147
		Given a graphical representation of a spinner partitioned into sectors of different sizes, each containing one of several possible pictures, label events as certain or impossible or pairs of events as more, less, or equally likely.	SMMA_LO_01212
		Given a sentence describing an observed event, label a future occurrence as certain, possible, or impossible.	SMMA_LO_01143
		Given information about a current situation, classify a future event as being certain, possible, or impossible.	SMMA_LO_01139
7.SP.C.7	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies. If the agreement is not good, explain possible sources of the discrepancy.		
7.SP.C.7.a	Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events.	Given a graphical representation of an urn containing balls of three colors, determine qualitatively which event is more probable to occur.	SMMA_LO_01163
		Express an event as a ratio of the number of favorable outcomes to the total number of outcomes (bowl containing marbles of two colors).	SMMA_LO_01179
		Write a fraction to express the probability of an event.	SMMA_LO_01667
		Create a set of colored balls whose contents are specified by whether it is certain, possible, or impossible to select a particular color.	SMMA_LO_01153
		Within the context of selecting without replacement from a cup containing three balls, each of a different color, label a given event prior to each selection as certain, possible, or impossible.	SMMA_LO_01147
		Given a graphical representation of a spinner partitioned into sectors of different sizes, each containing one of several possible pictures, label events as certain or impossible or pairs of events as more, less, or equally likely.	SMMA_LO_01212
		Using a graphical representation of an urn and a set of balls of two colors, modify a random experiment so that the qualitative probability of getting one color is greater than that of getting the other color.	SMMA_LO_01161

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
		Given a graphical representation of an urn containing balls of three colors, determine qualitatively which event is more probable to occur (5 to 8 times as many balls of one color as of the other color).	SMMA_LO_01157
		Given a graphical representation of an urn containing balls of two colors, determine qualitatively which color is more probable to be randomly selected (2 to 4 times as many balls of one color as of the other color).	SMMA_LO_01159
		Given a graphical representation of a bowl containing marbles of two colors, represent on a qualitative ordinal scale the probability of an event and its complement.	SMMA_LO_01171
		In the context of randomly selecting a card that has one of two pictures on it, compute the probability of each picture being selected from a set of cards (total of 4 to 7 cards).	SMMA_LO_01211
		Given a sentence describing an observed event, label a future occurrence as certain, possible, or impossible.	SMMA_LO_01143
		Determine the probability of an event.	SMMA_LO_01197
		Given the graphical representation of a bowl containing marbles of two colors, represent on a qualitative ordinal scale the probability of an event (6 to 11 marbles in the bowl).	SMMA_LO_01165
		Given information about a current situation, classify a future event as being certain, possible, or impossible.	SMMA_LO_01139
7.MP	Standards for Mathematical Practices		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
7.MP.1	Make sense of problems and persevere in solving them.		
	Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate. Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.	Identify the correct proportion for the context, and then solve.	SMMA_LO_01826
		Interpret the meaning of a point on the graph of a proportional relationship in terms of the situation; use this information to answer questions about the situation.	SMMA_LO_02089
7.MP.2	Reason abstractly and quantitatively.		
	Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent. Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.	Determine whether a chronological event is certain or impossible.	SMMA_LO_01137
		Establish that vertical angles are congruent.	SMMA_LO_00670
		Determine the event that is most or least likely; then conduct a simulation in which the results are recorded so that theoretical and experimental probability can be compared.	SMMA_LO_01738

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
		Create a set of colored balls whose contents are specified by whether it is certain, possible, or impossible to select a particular color.	SMMA_LO_01153
		Within the context of selecting without replacement from a cup containing three balls, each of a different color, label a given event prior to each selection as certain, possible, or impossible.	SMMA_LO_01147
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	SMMA_LO_01203
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	SMMA_LO_01200
7.MP.3	Construct viable arguments and critique the reasoning of others.		
	Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.	Establish that vertical angles are congruent.	SMMA_LO_00670

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
7.MP.4	Model with mathematics.		
	Mathematically proficient students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. When given a problem in a contextual situation, they identify the mathematical elements of a situation and create a mathematical model that represents those mathematical elements and the relationships among them. Mathematically proficient students use their model to analyze the relationships and draw conclusions. They interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	Determine whether a chronological event is certain or impossible.	SMMA_LO_01137
		Determine the average (mean) of a data set of three to five customary weights or metric masses.	SMMA_LO_00836
		Match equations and inequalities with real-world situations.	SMMA_LO_02140
		Read and interpret data from a circle graph labeled with percents.	SMMA_LO_01208
		Determine distances from scale drawings (inches to miles, cm to km).	SMMA_LO_00815
		Compare the absolute values of positive and negative quantities in a real-world situation.	SMMA_LO_02111
		Determine the event that is most or least likely; then conduct a simulation in which the results are recorded so that theoretical and experimental probability can be compared.	SMMA_LO_01738
		Create a set of colored balls whose contents are specified by whether it is certain, possible, or impossible to select a particular color.	SMMA_LO_01153
		Write an inequality of the form $px + q > r$ or $px + q < r$ to represent a constraint in a real-world problem.	SMMA_LO_02083
		Within the context of selecting without replacement from a cup containing three balls, each of a different color, label a given event prior to each selection as certain, possible, or impossible.	SMMA_LO_01147
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	SMMA_LO_01203

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
		In the context of randomly selecting a card that has one of two pictures on it, compute the probability of each picture being selected from a set of cards (total of 4 to 7 cards).	SMMA_LO_01211
		Identify the correct proportion for the context, and then solve.	SMMA_LO_01826
		Complete and interpret a pictograph.	SMMA_LO_01207
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	SMMA_LO_01200
7.MP.5	Use appropriate tools strategically.		
	Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.	Measure complementary or supplementary angles and find the sum of the angle measures.	SMMA_LO_00663
		Determine distances from scale drawings (inches to miles, cm to km).	SMMA_LO_00815
		Determine the event that is most or least likely; then conduct a simulation in which the results are recorded so that theoretical and experimental probability can be compared.	SMMA_LO_01738
		Create a set of colored balls whose contents are specified by whether it is certain, possible, or impossible to select a particular color.	SMMA_LO_01153
		Measure complementary or supplementary angles and find the sum of the angle measures.	SMMA_LO_00661
7.MP.6	Attend to precision.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Translate an expression into a written phrase (two-step).	SMMA_LO_01816
		Identify the number sentence that can be used to solve a two-step problem in context.	SMMA_LO_01297
		Identify the equation translated from a written phrase.	SMMA_LO_01852
		Describe situations that can be represented by opposite quantities.	SMMA_LO_02086
		Identify the written phrase that is a translation of a expression or inequality.	SMMA_LO_01815
		Rewrite an expression from context by factoring and combining like terms.	SMMA_LO_02150
		Identify the equation that translates the written phrase ($ax + b = c$).	SMMA_LO_00386
		Determine the most accurate representation of the circumference of a circle.	SMMA_LO_01784
		Identify the equation that translates the written phrase ($ax + b = c$).	SMMA_LO_00385
		Identify the two-step equation that is a translation of the written phrase within a context.	SMMA_LO_01814
7.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Rewrite an expression from context by factoring and combining like terms.	SMMA_LO_02150
		Extend an arithmetic sequence for three more terms.	SMMA_LO_01803
7.MP.8	Look for and express regularity in repeated reasoning.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 7	SuccessMaker Item Description	Item ID
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Translate an expression into a written phrase (two-step).	SMMA_LO_01816
		Identify the number sentence that can be used to solve a two-step problem in context.	SMMA_LO_01297
		Identify the equation translated from a written phrase.	SMMA_LO_01852
		Describe situations that can be represented by opposite quantities.	SMMA_LO_02086
		Identify the written phrase that is a translation of a expression or inequality.	SMMA_LO_01815
		Rewrite an expression from context by factoring and combining like terms.	SMMA_LO_02150
		Identify the equation that translates the written phrase ($ax + b = c$).	SMMA_LO_00386
		Determine the most accurate representation of the circumference of a circle.	SMMA_LO_01784
		Identify the equation that translates the written phrase ($ax + b = c$).	SMMA_LO_00385
		Extend an arithmetic sequence for three more terms.	SMMA_LO_01803
		Identify the two-step equation that is a translation of the written phrase within a context.	SMMA_LO_01814

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 8	SuccessMaker Item Description	Item ID
8.NS	The Number System		
8.NS.A	Understand that there are irrational numbers, and approximate them using rational numbers.		
8.NS.A.2	Use rational approximations of irrational numbers to compare the size of irrational numbers. Locate them approximately on a number line diagram, and estimate their values.	Drag rational and irrational values to their correct positions on a number line.	SMMA_LO_02141
8.EE	Expressions and Equations		
8.EE.B	Understand the connections between proportional relationships, lines, and linear equations.		
8.EE.B.5	Graph proportional relationships interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.	Graph proportional relationships and interpret the unit rate as the slope of the graph.	SMMA_LO_02073
8.EE.B.6	Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane. Derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at $(0, b)$.	Use similar triangles to explain why the slope m is the same between any two distinct points on a nonvertical line in the coordinate plane.	SMMA_LO_02075
8.EE.C	Analyze and solve linear equations, inequalities, and pairs of simultaneous linear equations.		
8.EE.C.7	Fluently solve linear equations and inequalities in one variable.		
8.EE.C.7.a	Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solution. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).	Transform a given multi-step equation into a simpler form.	SMMA_LO_02079
8.EE.C.7.b	Solve linear equations and inequalities with rational number coefficients, including solutions that require expanding expressions using the distributive property and collecting like terms.	Find three consecutive integers when given their sum.	SMMA_LO_01639
8.EE.C.8	Analyze and solve pairs of simultaneous linear equations.		
8.EE.C.8.a	Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.	Identify the solution to a system of linear equations by locating the point of intersection on its graph.	SMMA_LO_02080

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 8	SuccessMaker Item Description	Item ID
		Model a real-world problem with a system of linear equations. Then solve it by locating the intersection point of the graphs of the two equations.	SMMA_LO_02134
8.EE.C.8.b	Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations including cases of no solution and infinite number of solutions. Solve simple cases by inspection.	If a system of linear equations has 0 or infinitely many solutions, solve it by inspection. If it has 1 solution, solve it either algebraically or by graphing.	SMMA_LO_02133
8.F	Functions		
8.F.A	Define, evaluate, and compare functions.		
8.F.A.2	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).	Identify the rate of change and the y-intercept of two linear functions, one represented in a verbal description, and one represented either graphically or algebraically.	SMMA_LO_02102
8.F.A.3	Interpret the equation $y = mx + b$ as defining a linear function whose graph is a straight line; give examples of functions that are not linear.	Derive the equation $y = mx$ for a line through the origin, and $y = mx + b$ for a line intercepting the vertical axis at b .	SMMA_LO_02076
8.G	Geometry		
8.G.A	Understand congruence and similarity.		
8.G.A.1	Verify experimentally the properties of rotations, reflections, and translations. Properties include: lines are taken to lines, line segments are taken to line segments of the same length, angles are taken to angles of the same measure, parallel lines are taken to parallel lines.	Reflect a figure on a coordinate plane over the x-axis, the y-axis, or the line $y = x$; verify properties of the rotation.	SMMA_LO_02122
		Rotate a figure on a coordinate plane; verify properties of the rotation.	SMMA_LO_02121
		Translate a figure on a coordinate plane; verify properties of the rotation.	SMMA_LO_02123
8.G.A.3	Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	Determine the algebraic expression used to find the coordinates of the image of a figure under a dilation with the origin as the center of dilation.	SMMA_LO_02142
8.G.A.4	Understand that a two-dimensional figure is similar to another if, and only if, one can be obtained from the other by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that demonstrates similarity.	Identify the figure that is not similar to the others. (simple shapes, counterexample)	SMMA_LO_00649
8.G.A.5	Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	In a figure in which parallel lines are cut by a transversal, identify the transformations that would line one angle up with another angle. Then, describe the relationship between the two angles.	SMMA_LO_02129
		Arrange statements to write a proof of a fact about either the angle sum or the exterior angle of a triangle.	SMMA_LO_02126
8.G.B	Understand and apply the Pythagorean Theorem.		

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 8	SuccessMaker Item Description	Item ID
8.G.B.6	Understand the Pythagorean Theorem and its converse.	Explain a proof of the converse of the Pythagorean Theorem.	SMMA_LO_02132
		Explain a proof of the Pythagorean Theorem.	SMMA_LO_02131
8.G.B.8	Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	Given two points on a coordinate grid, draw a right triangle whose hypotenuse connects the two points. Then use the Pythagorean Theorem to find the distance between the two points.	SMMA_LO_02100
		Find the measurement of the hypotenuse using the Pythagorean theorem. (2D)	SMMA_LO_01854
8.G.C	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.		
8.G.C.9	Understand and use formulas for volumes of cones, cylinders and spheres and use them to solve real-world context and mathematical problems.	Use a formula to find the volume of a cylinder.	SMMA_LO_00839
		Use a formula to find the volume of a cone or a sphere.	SMMA_LO_00844
8.SP	Statistics and Probability		
8.SP.B	Investigate chance processes and develop, use, and evaluate probability models.		
8.SP.B.5	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.		
8.SP.B.5.b	Represent sample spaces for compound events using organized lists, tables, tree diagrams and other methods. Identify the outcomes in the sample space which compose the event.	Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify all points that represent the sum given for a pair of outcomes.	SMMA_LO_01219
		Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify the point that represents a given pair of outcomes.	SMMA_LO_01218
8.MP	Standards for Mathematical Practices		
8.MP.1	Make sense of problems and persevere in solving them.		

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	<p>Mathematically proficient students explain to themselves the meaning of a problem, look for entry points to begin work on the problem, and plan and choose a solution pathway. While engaging in productive struggle to solve a problem, they continually ask themselves, "Does this make sense?" to monitor and evaluate their progress and change course if necessary. Once they have a solution, they look back at the problem to determine if the solution is reasonable and accurate.</p> <p>Mathematically proficient students check their solutions to problems using different methods, approaches, or representations. They also compare and understand different representations of problems and different solution pathways, both their own and those of others.</p>	Generate and solve an equation with variables on both sides of the equal sign in a real-world context.	SMMA_LO_02145
		Transform a given multi-step equation into a simpler form.	SMMA_LO_02079
		Model a real-world problem with a system of linear equations. Then solve it by locating the intersection point of the graphs of the two equations.	SMMA_LO_02134
8.MP.2	Reason abstractly and quantitatively.		
	<p>Mathematically proficient students make sense of quantities and their relationships in problem situations. Students can contextualize and decontextualize problems involving quantitative relationships. They contextualize quantities, operations, and expressions by describing a corresponding situation. They decontextualize a situation by representing it symbolically. As they manipulate the symbols, they can pause as needed to access the meaning of the numbers, the units, and the operations that the symbols represent.</p> <p>Mathematically proficient students know and flexibly use different properties of operations, numbers, and geometric objects and when appropriate they interpret their solution in terms of the context.</p>	Identify the figure that is not similar to the others. (simple shapes, counterexample)	SMMA_LO_00649
		Explain a proof of the converse of the Pythagorean Theorem.	SMMA_LO_02132
		Establish that alternate interior angles are congruent for parallel lines.	SMMA_LO_00672
		Explain a proof of the Pythagorean Theorem.	SMMA_LO_02131

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 8	SuccessMaker Item Description	Item ID
		Given two points on a coordinate grid, draw a right triangle whose hypotenuse connects the two points. Then use the Pythagorean Theorem to find the distance between the two points.	SMMA_LO_02100
		Identify the polygon that is not similar to the others (counterexample)	SMMA_LO_00645
		Solve a problem involving equal angle measures.	SMMA_LO_00677
		Arrange statements to write a proof of a fact about either the angle sum or the exterior angle of a triangle.	SMMA_LO_02126
8.MP.3	Construct viable arguments and critique the reasoning of others.		
	Mathematically proficient students construct mathematical arguments (explain the reasoning underlying a strategy, solution, or conjecture) using concrete, pictorial, or symbolic referents. Arguments may also rely on definitions, assumptions, previously established results, properties, or structures. Mathematically proficient students make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. Mathematically proficient students present their arguments in the form of representations, actions on those representations, and explanations in words (oral or written). Students critique others by affirming or questioning the reasoning of others. They can listen to or read the reasoning of others, decide whether it makes sense, ask questions to clarify or improve the reasoning, and validate or build on it. Mathematically proficient students can communicate their arguments, compare them to others, and reconsider their own arguments in response to the critiques of others.	Identify the figure that is not similar to the others. (simple shapes, counterexample)	SMMA_LO_00649
		Explain a proof of the converse of the Pythagorean Theorem.	SMMA_LO_02132
		Establish that alternate interior angles are congruent for parallel lines.	SMMA_LO_00672
		Explain a proof of the Pythagorean Theorem.	SMMA_LO_02131
		Given two points on a coordinate grid, draw a right triangle whose hypotenuse connects the two points. Then use the Pythagorean Theorem to find the distance between the two points.	SMMA_LO_02100

Arizona Standards Code	Arizona Mathematics Academic Standards, Grade 8	SuccessMaker Item Description	Item ID
		Identify the polygon that is not similar to the others (counterexample)	SMMA_LO_00645
		Arrange statements to write a proof of a fact about either the angle sum or the exterior angle of a triangle.	SMMA_LO_02126
8.MP.4	Model with mathematics.		
	Mathematically proficient students apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. When given a problem in a contextual situation, they identify the mathematical elements of a situation and create a mathematical model that represents those mathematical elements and the relationships among them. Mathematically proficient students use their model to analyze the relationships and draw conclusions. They interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	Generate and solve an equation with variables on both sides of the equal sign in a real-world context.	SMMA_LO_02145
		Choose an approximation based on a trend line for bivariate data.	SMMA_LO_02143
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	SMMA_LO_01226
		In the context of randomly selecting a card that has a certain me on it, compute the probability of each me being selected from a set of cards.	SMMA_LO_01215
		Model a real-world problem with a system of linear equations. Then solve it by locating the intersection point of the graphs of the two equations.	SMMA_LO_02134
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	SMMA_LO_01220
		Solve a problem in context using proportions.	SMMA_LO_01635
		Make predictions based on a sample.	SMMA_LO_01223
		Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify all points that represent the sum given for a pair of outcomes.	SMMA_LO_01219

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		Identify positive, negative, or no association for sets of actual data.	SMMA_LO_01222
		Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify the point that represents a given pair of outcomes.	SMMA_LO_01218
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	SMMA_LO_01216
8.MP.5	Use appropriate tools strategically.		
	Mathematically proficient students consider available tools when solving a mathematical problem. They choose tools that are relevant and useful to the problem at hand. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful; recognizing both the insight to be gained and their limitations. Students deepen their understanding of mathematical concepts when using tools to visualize, explore, compare, communicate, make and test predictions, and understand the thinking of others.	Identify similar triangles or rectangles on a geoboard.	SMMA_LO_00847
		Find the square root of a number using a calculator (numbers to 4000).	SMMA_LO_01120
		In the context of randomly selecting a card that has a certain me on it, compute the probability of each me being selected from a set of cards.	SMMA_LO_01215
		Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify the point that represents a given pair of outcomes.	SMMA_LO_01218
8.MP.6	Attend to precision.		
	Mathematically proficient students clearly communicate to others using appropriate mathematical terminology, and craft explanations that convey their reasoning. When making mathematical arguments about a solution, strategy, or conjecture, they describe mathematical relationships and connect their words clearly to their representations. Mathematically proficient students understand meanings of symbols used in mathematics, calculate accurately and efficiently, label quantities appropriately, and record their work clearly and concisely.	Explain a proof of the converse of the Pythagorean Theorem.	SMMA_LO_02132

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		Explain a proof of the Pythagorean Theorem.	SMMA_LO_02131
		In a figure in which parallel lines are cut by a transversal, identify the transformations that would line one angle up with another angle. Then, describe the relationship between the two angles.	SMMA_LO_02129
		Arrange statements to write a proof of a fact about either the angle sum or the exterior angle of a triangle.	SMMA_LO_02126
8.MP.7	Look for and make use of structure.		
	Mathematically proficient students use structure and patterns to assist in making connections among mathematical ideas or concepts when making sense of mathematics. Students recognize and apply general mathematical rules to complex situations. They are able to compose and decompose mathematical ideas and notations into familiar relationships. Mathematically proficient students manage their own progress, stepping back for an overview and shifting perspective when needed.	Identify the rule for an iterative pattern.	SMMA_LO_01840
		Find a missing number in a geometric sequence (first number 1 to 5, factors 2 to 5).	SMMA_LO_01117
		Find a missing number in an arithmetic sequence (-200 to 200, intervals 3 to 8).	SMMA_LO_01115
8.MP.8	Look for and express regularity in repeated reasoning.		
	Mathematically proficient students look for and describe regularities as they solve multiple related problems. They formulate conjectures about what they notice and communicate observations with precision. While solving problems, students maintain oversight of the process and continually evaluate the reasonableness of their results. This informs and strengthens their understanding of the structure of mathematics which leads to fluency.	Choose an approximation based on a trend line for bivariate data.	SMMA_LO_02143
		Identify the rule for an iterative pattern.	SMMA_LO_01840
		Find a missing number in a geometric sequence (first number 1 to 5, factors 2 to 5).	SMMA_LO_01117
		Find a missing number in an arithmetic sequence (-200 to 200, intervals 3 to 8).	SMMA_LO_01115