NSCAS NEBRASKA STUDENT-CENTERED ASSESSMENT SYSTEM

Summative Assessment
Mathematics Grade 1 Range Achievement Level Descriptors

What are Range Achievement Level Descriptors?

Range Achievement Level Descriptors (ALDs) demonstrate how skills described in the Nebraska College and Career Ready Standards for Mathematics likely change and become more sophisticated as ability and performance increases. The ALDs also describe the evidence needed to help infer where a student is along the range. This range is defined by Nebraska using three levels:

- Developing – not yet demonstrating proficiency
- On Track – demonstrating proficiency
- Advanced– demonstrating advanced proficiency

The ALDs help show the within-standard reasoning complexity that increases in sophistication as the achievement levels increase. Such skill advancement is often related to increases in content difficulty, increases in reasoning complexity, and a reduction in the supports required for students to demonstrate what they know within a task or item.

The Range ALDs provide a way to communicate a progression that is visible and usable to all stakeholders, while also providing a foundation for a robust bank of assessment items that meets the needs of all Nebraska students.

How were the Nebraska's Mathematics Range ALDs updated for the new standards?

Draft Range ALDs for the new standards were created and reviewed by panels comprised of Nebraska educators during Spring of 2023. The updated ALDs were shared with NDE and their feedback was applied.

How will Nebraska's ELA Range ALDs change in relation to the new standards?

The updated ALDs were revised to reflect the new standards. The updated ALDs will be taken to the 2023 Item Writing Workshop where they will be used to help facilitate item writing. Feedback will be recorded at the upcoming Item Writing Workshop from Nebraska educators based on their use of the ALDs for writing items and at the upcoming standard setting from panelists. This feedback will then be used to update the ALDs. The updated ALDs will be shared with NDE to obtain their final recommendations.

NSCAS Mathematics
Grade 1 Range ALDs

Indicator	Developing learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. A developing learner…	On Track learners demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. An on-track learner…	Advanced Benchmark learners demonstrate advanced proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska Advanced Standards. An advanced learner…
NUMBER: Students will solve problems and reason with number concepts using multiple representations, make connections within math and across disciplines, and communicate their ideas.			
1.N.1 Subitizing: Students will quantify briefly shown collections and verbally label the arrangements without counting.			
1.N.1.a Without counting, recognize and verbally label arrangements for briefly shown collections up to 20 (e.g.," I saw 16." "How did you know?" "I saw 10 and 6, that is 16").	Assessed at the local level		
1.N.2 Counting and Cardinality: Students will understand the relationship between numbers and quantities to extend the counting sequence.			
1.N.2.a Count verbally by ones and tens within 120 starting at any given number.	Extends counting by ones to the next number given a counting sequence. The next number must be from 101 to 120. (e.g.,: Which number is next when counting by ones? 99, 100, 101, ____) DOK: 1 Extends counting by tens to the next multiple of ten or next set of multiples of tens, given a counting sequence. The next multiple of ten or set must include 110 and/or 120. (e.g.,: Which numbers are next when counting by tens? 80, 90, 100, ____, ____) DOK: 1 Refer to 1.N.2.d for referencing counting sequences with pattern rules. Max DOK: 1	Extends counting by ones to the next set of numbers given a counting sequence. The last number must be from 101 to 120. (e.g.,: Which numbers are next when counting by ones? (102, 103, 104, ____, ____) DOK: 1 Determines the missing number in a counting sequence when counting by ones or tens. The last number given must be from within 101 to 120. (e.g.,: Which number is missing when counting by ones? (102, 103, 104, ____, 106) DOK: 1 Identifies the next set of numbers when counting by ones or tens given one starting number. The next set of numbers must end within 101 to 120. (e.g., Which list of numbers comes after 70 when counting by tens?) DOK: 1 Max DOK: 1	Determines more than one missing number in a counting sequence when counting by ones or tens. The last number given must be from within 101 to 120. (e.g.,: Which numbers are missing when counting by tens? (70, 80, ____, 100, ____, 120) DOK: 1 Writes the next set of numbers when counting by ones or tens given one starting number. The next set of numbers must end from 101 to 120. (e.g., Which numbers come after 108 when counting by ones? Enter the numbers in the blanks. 108, ____, _____, _____) DOK: 2 Max DOK: 2
1.N.2.b Count verbally by ones and tens within 120 starting at any given number. Understand that the given number is a direct representation of the total objects in a given set and counting on each successive number represents adding an additional object, and counting back each proceeding number represents removing an object.	Assessed at the local level		
1.N.2.c Write numerals to match a representation of a given set of objects for numbers up to 120.	Determines the numeral for a given representation of multiples of ten from 10 - 120 using objects, when objects are organized as groups of ten. Objects may include base-ten blocks as long as they are not referenced as such. See 1.N.3.a for referencing base-ten blocks. DOK: 1 Max DOK: 1	Determines the numeral for a given representation of numbers within 1 - 119, other than multiples of ten, using objects. Objects may include base-ten blocks as long as they are not referenced as such. See 1.N.3.a for referencing base-ten blocks. DOK: 1 Determines the numeral for a given representation of multiples of ten from 10 - 120 using objects, when objects are NOT organized as groups of ten. Objects may include base-ten blocks as long as they are not referenced as such. See 1.N.3.a for referencing base-ten blocks. DOK: 1 Max DOK: 1	Creates the representation of a number using objects given a number 1 - 120. Objects may include base-ten blocks as long as they are not referenced as such. See 1.N.3.a for referencing base-ten blocks. DOK: 2 Determines the numerals for more than one given representation of numbers within 1 - 120 using objects. Objects may include base-ten blocks as long as they are not referenced as such. See1.N.3.a for referencing base-ten blocks. DOK: 1 Max DOK: 1

1.N.2.d Understand patterns of skip counting by 2s, 5s, and 10s.	Determines the corresponding counting sequence given the rule of adding 2, 5, or 10 and the sequence is within 100 or vice versa (e.g. Which counting sequence follows the rule of adding 2?). DOK: 1 Refer to 1.N.2.a for extending a counting sequence by 1 or 10. Max DOK: 1	Determines the corresponding counting sequence given the rule of adding 2, 5, or 10 and at least part of the sequence is within 101 - 120 (e.g. Which counting sequence follows the rule of adding 10?). DOK: 1 Max DOK: 1	Determines the corresponding sequence given the rule of subtracting 2, 5 or 10 and the sequence is within 120 or vice versa (e.g. Which counting sequence follows the rule of subtracting 10?). DOK: 1 Max DOK: 1
1.N.3 Base Ten: Students will represent and compare two-digit numbers to gain foundations for place value.			
1.N.3.a Understand 10 as a bundle, collection, or (more abstractly) composition of ten ones and that the two digits of a two-digit number represent a composition of some tens and some ones.	Determines the number of tens and ones in two-digit numbers, other than multiples of ten, when given a visual representation using base-ten blocks or other objects grouped in groups of tens and ones. DOK: 1 Determines the equation with two addends (expanded form) to represent the number of tens and ones in the numbers 11 - 19 when given a visual representation using base-ten blocks or other objects grouped in groups of tens and ones. (e.g., 19 = 10 + 9) The term expanded form is not used. DOK: 1 Max DOK: 1	Determines the number of tens and ones in two-digit numbers, other than multiples of ten, without a visual representation. DOK: 1 Determines the equation with two addends (expanded form) to represent the number of tens and ones in two-digit numbers, other than multiples of ten, when given a visual representation using base-ten blocks or other objects grouped in groups of tens and ones. (e.g., 34 = 30 + 4) The term expanded form is not used. DOK: 1 Determines the equation with two addends (expanded form) to represent the number of tens and ones in numbers 11 - 19 without a visual representation. The term expanded form is not used. DOK: 1 Max DOK: 1	Determines the equation with two addends (expanded form) to represent the number of tens and ones in two-digit numbers, other than multiples of ten, without a visual representation. The term expanded form is not used. DOK: 1 Determines the value of the missing number for a two-digit whole number in the incomplete equation with two addends (expanded form) of the number (e.g., Determines the value of the missing number in 47 = 40 + ?). The term expanded form is not used. DOK: 2 Max DOK: 2
1.N.3.b Compare two, two-digit numbers using words greater than, less than, equal to, and symbols <, >, =. Justify comparisons based on the number of tens and ones.	Represents comparisons between two whole numbers when one value is from 1 - 10 and one value is between 10 and 100 using symbols. DOK: 1 Determines the least or greatest number given two or more numbers between 10 and 100. DOK: 1 Max DOK: 1	Represents comparisons with of two whole numbers, both being between 10 and 100 using symbols. DOK: 1 Orders three whole numbers with at least one value being between 10 and 100 (may or may not use symbols). DOK: 2 Determines the number that is greater than a given number and less than another given number, both being between 10 and 100 (e.g., finds the number that is less than 85 and greater than 63.). DOK: 1 Analyzes and/or justifies comparisons between two numbers when one value is 1 - 10 and one value is between 10 and 100. (e.g., explain whether a given or generated comparison is accurate). DOK: 3 Max DOK: 3	Orders more than three whole numbers with at least one value being between 10 and 100 (may or may not use symbols). DOK: 2 Analyzes and/or justifies comparisons between two numbers when both are between 10 and 100 (e.g., explain whether a given or generated comparison is accurate). DOK: 3 Max DOK: 3
1.N.4 Number and Operations: Students will compute using addition and subtraction.			
1.N.4.a Add and subtract within 20, using flexible strategies such as counting on or counting back, making ten, using ten, and using doubles and near doubles.	Adds or subtracts within 20 with supports provided (i.e., one operation). DOK: 1 Performs multi-step addition or subtraction within 20 with supports provided (one operation but more than one step). DOK: 2 Refer to 3.G.4.a for adding/subtracting within 100 using number lines. Max DOK: 1	Adds or subtracts within 20 without supports provided (i.e. one operation). DOK: 1 Both adds and subtracts within 20 with supports provided (i.e. both operations). DOK: 2 Performs multi-step addition or subtraction within 20 without supports provided (one operation but more than one step). DOK: 2 Max DOK: 2	Both adds and subtracts within 20 without supports provided. (i.e. both operations). DOK: 2 Max DOK: 2
1.N.4.b Efficiently, flexibly, and accurately add and subtract within 10.	Assessed at the local level		

1.N.4.c Find the difference between two numbers that are multiples of 10, ranging from 10 to 90 using concrete models, drawings, or strategies, and write the corresponding equation.	None at this level. Refer to 1.N.4.a for subtracting within 20. Refer to 3.G.4.a for adding/subtracting within 100 using number lines.	Subtracts within 20 - 100 by subtracting two multiples of 10 with supports provided. DOK: 1 Represents the subtraction problem with a numerical expression when given a subtraction model for subtracting within 20 - 100 using two multiples of 10. Max DOK: 1	Subtracts within 20 - 100 by subtracting two multiples of 10 without supports. DOK: 1 Max DOK: 1
1.N.4.d Mentally find 10 more or 10 less than a two-digit number without having to count and explain the reasoning used.	Assessed at the local level		
1.N.4.e Add within 100, including adding a two-digit number and a one-digit number, adding a two-digit number and a multiple of ten, using concrete models, drawings, and strategies that reflect an understanding of place value, the relationship between addition and subtraction, and the properties of operations. Relate the strategy to a written method and explain the reasoning used to solve.	None at this level. Refer to 1.N.4.a for subtracting within 20. Refer to 3.G.4.a for adding/subtracting within 100 using number lines.	Adds within 20 - 100 by adding a two-digit number, including multiples of ten, to a one-digit number with supports provided. May or may not require regrouping. DOK: 1 Adds within 20 - 100 by adding a multiple of ten to a two-digit number with supports provided. May or may not require regrouping. DOK: 1 Max DOK: 1	Adds within 20 - 100 by adding a two-digit number, including multiples of ten, to a one-digit number without supports provided. May or may not require regrouping. DOK: 1 Adds within 20 - 100 by adding a multiple of ten to a two-digit number without supports provided. May or may not require regrouping. DOK: 1 Adds within 20 - 100 by adding two, two-digit numbers, neither of which are multiples of ten, with supports. DOK: 1 Explains how to add with 20-100 by relating strategy to a written method. DOK: 3 Max DOK: 3
1.N.4.f Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; sometimes it is necessary to compose a ten.	Assessed at the local level		
1.N.4.g Subtract multiples of ten from two-digit numbers (positive or zero differences) using concrete models, drawings, and strategies that reflect an understanding of place value, the relationship between addition and subtraction, and the properties of operations. Relate the strategy to a written method and explain the reasoning used to solve.	None at this level. Refer to 1.N.4.a for subtracting within 20. Refer to 3.G.4.a for adding/subtracting within 100 using number lines.	Subtracts within 20 - 99 by subtracting two-digit multiples of ten from a two-digit number with supports provided. May or may not require regrouping. DOK: 1 Difference should be positive or 0. Max DOK: 1	Explains how to subtract multiples a 10 with 20-100 by relating strategy to a written method. DOK: 3 Difference should be positive or 0. Max DOK: 3
1.N.5 Number and Algebraic Relationships: Students will understand and apply properties of operations and the relationship between addition and subtraction to solve problems.			
1.N.5.a Use the meaning of the equal sign to determine if equations are true and give examples of equations that are true (e.g., 4 = 4, 6 = 7 – 1, 6 + 3 = 3 + 6, 7 + 2 = 5 + 4).	None at this level.	Determines whether equations with whole numbers on both sides of the equal sign are true. DOK: 1 Determines whether an equation with an operation on one side of the equal sign is true. DOK: 1 Determines whether an equation with operations on both sides of the equal sign is true. DOK: 1 Determines whether more than one equation is true. At least one equation must have an operation on at least one side of the equal sign. DOK: 1 Addition and subtraction are within 20. Max DOK: 1	Determines whether an equation with operations on both sides of the equal sign is true where both sides of the equal sign use different operations. DOK: 2 Addition and subtraction are within 20. Max DOK: 2
1.N.5.b Use the relationship of addition and subtraction to solve subtraction problems (e.g., find 12 – 9 =_____, using the addition fact 9 + 3 = 12).	None at this level. Refer to 1.N.4.a for addition and subtraction within 20. Refer to 1.N.5.c for unknowns in addition and subtraction problems.	Determines corresponding addition or subtraction problems when given the corresponding equation (e.g., Given 12 - ? = 3, determines 12 + 3 = ? To be a corresponding equation with an equivalent unknown.). DOK: 2 Max DOK: 2	Solves subtraction problems within 20 - 100 given an addition fact from within 20 - 100. Resulting subtraction should not involve two multiples of ten or only subtracting 10 (e.g. Given 35 + 12 = 23, what is 35 - 23?). DOK: 2 Max DOK: 2

1.N.5.c Determine the unknown whole number in an addition or subtraction equation (e.g., 7 + ? = 13).	None at this level. Refer to 1.N.4.a for addition and subtraction within 20. Refer to 1.N.5.b for using addition facts to solve subtraction problems or determine corresponding addition/subtraction problems from a given problem.	Determines an unknown addend in an addition equation with whole numbers within 20 (e.g. Δ + 13 = 17 What is the value of Δ?). DOK: 2 Determines the unknown subtrahend in a subtraction equation with whole numbers within 20 (e.g. 19 - □ = 7 What is the value of □?). DOK: 2 Max DOK: 2	Determines the unknown minuend in a subtraction equation with whole numbers within 20 and a symbol for the unknown (e.g. □ - 14 = 6 What is the value of □?). DOK: 2 Determines the unknown whole number in more than one addition or subtraction equation with whole numbers within 20 and a symbol for the unknown. Unknowns can be the addend, minuend, or subtrahend. DOK: 2 Max DOK: 2
1.N.5.d Use the commutative property of addition to develop addition strategies and compose/decompose numbers to develop addition and subtraction strategies. (See other flexible strategies in 1.N.4.a).	Assessed at the local level		
1.N.5.e Solve problems that call for addition of three whole numbers whose sum is less than or equal to 20 using flexible strategies with objects, drawings, and/or equations.	None at this level. Refer to 1.G.3.a for authentic problems involving money.	Solve two-step problems that require only addition within 20 (i.e. adding 3 numbers whose sum is less than or equal to 20). DOK: 2 Max DOK: 2	Solve three-step problems that require addition of 3 numbers within 20 (two steps) and subtraction within 20 (one step). DOK: 2 Max DOK: 2
1.N.5.f Solve authentic problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem by using objects, drawings, and/or equations with a symbol for the unknown number to represent the problem.	None at this level. Refer to 1.G.3.a for authentic problems involving money. Refer to 1.N.5.e for two-step authentic problems involving adding 3 numbers within 20. Refer to 2.N.5.a for authentic problems within 100.	Solve single-step authentic addition or subtraction problems within 20. DOK: 2 Max DOK: 2	Solve two-step authentic problems that require both addition and subtraction within 20. DOK: 2 Solve two-step authentic problems that require only subtraction within 20. DOK: 2 Max DOK: 2
1.N.5.g Create an authentic problem to represent a given equation involving addition and subtraction within 20.	Assessed at the local level		
ALGEBRA: Students will solve problems and reason with algebra using multiple representations, make connections within math and across disciplines, and communicate their ideas.			
SEE NUMBER AND ALGEBRAIC RELATIONSHIPS IN NUMBER (1.N.5)			
GEOMETRY: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.			
1.G.1 Shapes and Their Attributes: Students will represent and describe the attributes of two-dimensional shapes.			
1.G.1.a Determine geometric attributes of two-dimensional shapes regardless of orientation or size for rhombi, trapezoids, and hexagons (e.g., a hexagon is closed with six sides).	None at this level. Refer to 2.G.1.b for drawing shapes based on number of sides and angles.	Determines defining and/or non-defining attributes when the attributes are labeled on a two-dimensional shape. DOK: 1 Items may include context. Max DOK: 1	Determines defining and/or non-defining attributes of a two-dimensional shape without a visual given. DOK: 1 Items may include context. Max DOK: 1
1.G.1.b Determine geometric attributes of three-dimensional shapes including cones, cylinders, cubes, and rectangular prisms regardless of orientation or size.	None at this level.	Determines defining and/or non-defining attributes when the attributes are labeled on a three-dimensional shape. DOK: 1 Items may include context. Max DOK: 1	Determines defining and/or non-defining attributes of a three-dimensional shape without a visual given. DOK: 1 Items may include context. Max DOK: 1

1.G.1.c Describe lines and sides of shapes as parallel or non-parallel.	None at this level.	Identifies description of parallel or non-parallel lines. DOK: 1 Identifies shapes that have parallel sides when labeled. DOK: 1 Identifies shapes that can't have parallel sides when labeled. DOK: 1 Max DOK: 1	Identifies shapes that have parallel sides without a visual given. DOK: 1 Identifies shapes that can't have parallel sides without a visual given.. DOK: 1 Max DOK: 1
1.G.1.d Partition circles and rectangles into two and four equal parts using the language halves and fourths.	Determines the rectangle(s) divided into halves or fourths when the parts are the same shape. Does not use "quarter." DOK: 1 Determines which part/shape represents a half or a fourth of a given rectangle. Does not use "quarter." DOK: 1 Items may include context. Refer to 2.G.1.d for thirds. Refer to 2.G.1.e for equal parts that are not the same shape. Max DOK: 1	Determines the circle(s) divided into halves or fourths when the parts are the same shape. Does not use "quarter." DOK: 1 Determines which part/shape represents a half or a fourth of a given circle when the parts are the same shape. Does not use "quarter." DOK: 1 Items may include context. Max DOK: 1	Determines the rectangle(s) and/or circle(s) divided into quarters when the parts are the same shape. May also use halves and fourths. DOK: 1 Determines which part/shape represents a third of a given rectangle or circle when the parts are the same shape. May also use halves and fourths. DOK: 1 Describes a rectangle or circle divided into 2 or 4 equal parts as divided into halves/fourths or describes each part as representing a half/fourth of the shape. The parts are the same shape. DOK: 1 Items may include context. Max DOK: 1
1.G.2 Measurement: Students will measure and compare lengths.			
1.G.2.a Measure the length of an object as a whole number of same-size, non-standard units by placing them end to end.	Determines the correct placement of shorter objects used to measure the length of a longer object (e.g., given a pencil, identify the set of paper clips placed end to end, that equals the length of the pencil). Does not require measuring using a ruler. DOK: 1 Determines the number of shorter objects needed to represent the length of a longer object when the shorter objects are already placed end to end (e.g., given a paper clip and a pencil, identify the number of paper clips, end to end, that equals the length of the pencil). Does not require measuring using a ruler. DOK: 1 Items may include context. Max DOK: 1	Determines the number of shorter objects needed to represent the length of a longer object when the shorter object is only shown once (e.g., given a paper clip and a pencil, identify the number of paper clips, end to end, that equals the length of the pencil by placing them next to the pencil). Does not require measuring using a ruler. DOK: 1 Items may include context. Max DOK: 1	None at this level.
1.G.2.b Order three objects by directly comparing their lengths or indirectly by using a third object.	Identifies when three objects are in order from longest to shortest or shortest to longest based on comparisons to each other or a given object. Does not require measuring using a ruler. DOK: 1 Items may include context. Max DOK: 1	Places objects in order from longest to shortest or shortest to longest based on comparisons to each other or a given object. Does not require measuring using a ruler. DOK: 1 Items may include context. Max DOK: 1	Determines the sequence of longest to shortest or shortest to longest for more than three objects. Does not require measuring using a ruler. DOK: 1 Items may include context. Max DOK: 1
1.G.3 Time and Money: Students will solve problems with coins and tell time to the half hour.			

1.G.3.a Understand the value of dimes and pennies (e.g., a dime is equal to ten pennies) relating to tens and ones and solve problems involving dimes and pennies using the ¢ symbol appropriately.	Determines whether the given coins are dimes or pennies. DOK: 1 Determines the value, in cents, of a dime or penny. DOK: 1 Determines how many pennies are equal in value to a given number of dimes, within 100. DOK: 1 Solves authentic problems involving dimes and pennies using either addition or subtraction within 20, with supports. DOK: 2 May include problems where the only context is the money itself. Converting number of dimes to cents does not count as an operation in this context. Answers should use "cents" or the ¢ symbol appropriately. Refer to 1.N.4.d for subtracting 10 from a two-digit number. Refer to 2.G.5.a for problems that include coins/bills other than dimes or pennies. Max DOK: 2	Solves authentic problems involving dimes and pennies using either addition or subtraction within 20, without supports. DOK: 2 Solves authentic problems involving dimes and pennies using both addition and subtraction within 20, with supports. One operation does use a visual support. DOK: 2 Solves authentic problems involving only subtraction within 20 - 100 and dimes, with supports. (e.g., Zack has 3 dimes. He spends two dimes. How many cents does Zack have left?) DOK: 2 Solves authentic problems involving only subtraction within 20 - 100 and dimes and pennies with supports where the only values subtracted are multiples of 10. (e.g., Zack has 3 dimes and 4 pennies. He spends two dimes. How many cents does Zack have left?) DOK: 2 Solves authentic problems involving dimes and pennies using only addition within 20 - 100, with supports. Limited to two-digit values, including multiples of 10, added to one-digit values or values that are multiples of 10 added to a two-digit value. DOK: 2 May include problems where the only context is the money itself. Converting number of dimes to cents does not count as an operation in this context. Answers should use "cents" or the ¢ symbol appropriately. Max DOK: 2	Solves authentic problems involving dimes and pennies using both addition and subtraction within 20 without supports. DOK: 2 Solves authentic problems involving only dimes and subtraction within 100, without supports. DOK: 2 Solves authentic problems involving dimes and pennies using only addition within 20 - 100, without supports l. Limited to two-digit values, including multiples of 10, added to one-digit values or values that are multiples of 10 added to a two-digit value. DOK: 2 Solves authentic problems involving dimes and pennies using only addition within 20 - 100, with supports, when adding two, two-digit values and neither are a multiple of 10. DOK: 2 May include problems where the only context is the money itself. Converting number of dimes to cents does not count as an operation in this context. Answers should use "cents" or the ¢ symbol appropriately. Max DOK: 2
1.G.3.b Count collections of like coins (penny, nickel, and dime) relating to patterns of counting by 1s, 5s, and 10s.	Determines what coin can be used to represent a given counting pattern. DOK: 1 Max DOK: 1	Represents a collection of one type of coin with a counting pattern of 1s, 5s, or 10s. DOK: 1 Max DOK: 1	Represents a collection of two types of coins with two sets of counting patterns of 1s, 5s, or 10s. DOK: 1 Max DOK: 1
1.G.3.c Tell and write time to the half hour and hour using analog and digital clocks.	Determines the correct time to the nearest hour or half-hour using a digital clock. Does not require reference to a.m. or p.m. DOK: 1 Identifies the correct time to the nearest hour or half-hour using an analog clock. Does not require reference to a.m. or p.m. DOK: 1 Items may include context. Refer to 2.G.5.b for determining a.m. or p.m. Refer to 3.G.4.a for time interval terms (quarter to/past, half past, etc.). Refer to 3.G.4.b for elapsed time problems. Max DOK: 1	Writes the correct time to the nearest hour or half-hour using an analog clock. Does not require reference to a.m. or p.m. DOK: 2 Represents a given time to the nearest hour or half-hour on an analog clock. DOK: 1 Items may include context. Max DOK: 2	Explains or justifies given times to the nearest hour or half-hour and their representations on a digital or analog clock (e.g., explains why a clock with the minute hand at the 6 represents 30 minutes or the half-hour). DOK: 3 Items may include context. Max DOK: 3
DATA: Students will solve problems and reason with data/probability using multiple representations, make connections within math and across disciplines, and communicate their ideas.			
1.D.1 Data Collection: Students will formulate questions to collect, organize, and represent data.			

1.D.1.a Collect, organize, and represent a data set with up to three categories using a picture graph.	Identifies a pictograph with a scale of 1 that represents a given data set with up to three categories. DOK: 1 Refer to 2.D.2.a for pictographs with four categories. Refer to 1.D.2.a for interpreting and solving problems using information provided in pictographs with a scale of 1 and up to three categories. Max DOK: 1	Creates a pictograph with up to three categories and a scale of 1. Includes answering a question about steps in creating the graph. DOK: 2 Identifies a pictograph with a scale of 1 and up to three categories that represents an incomplete data set. Determining quantity differences or comparisons is not required. (e.g., Three categories are present in options but data is given for 2 categories where only one option has the correct values represented for the given categories.) DOK: 1 Max DOK: 2	Answers multiple questions about the creation of a pictograph with a scale of 1 and up to three categories. DOK: 2 Analyzes pictographs with up to three categories and a scale of 1 in relation to their corresponding data (e.g., explains an error in how a pictograph was created given a data set and a pictograph that incorrectly represents the data). DOK: 3 Max DOK: 3
1.D.2 Analyze Data and Interpret Results: Students will analyze the data and interpret the results.			
1.D.2.a Ask and answer questions about the total number of data points, how many in each category, and compare categories by identifying how many more or less are in a particular category using a picture graph.	Solves problems by reading information from pictographs with a scale of 1 and up to three categories. (e.g. How many students voted for dog as their favorite pet? How many students voted overall?) DOK: 2 Addition is within 20. Refer to 2.D.2.a for pictographs with four categories. Max DOK: 2	Solves comparison problems (more/less/same) and quantity-difference problems (how many more/how many less) by reading information from pictographs with a scale of 1 and up to three categories. (e.g. Which animal was voted as the favorite pet? How many more students voted for dog than cat?) DOK: 2 Addition or subtraction is within 20. Max DOK: 2	Identifies a pictograph with a scale of 1 and up to three categories that represents an incomplete data set that requires interpretation, including comparisons and quantity differences. DOK: 2 Ex: Ty, Deb, and Fred have a total of 12 points. Ty has 8 points. Deb and Fred each have the same number of pencils. Which pictograph shows this data? Analyzes statements about comparisons or quantity differences based on data represented in a pictograph with a scale of 1 and up to three categories. (e.g., determine the error in a given statement caused by misreading the information in the pictograph). DOK: 3 Addition or subtraction is within 20. Max DOK: 3