

Change in Materials from Primary to Generalization: Mathematics

Challenging the student with a Level 3 or Level 2 assessment task may allow the student the opportunity to generalize the skill. Generalization allows the student to demonstrate that he or she has internalized the skills by applying them in a new context. For a student with a cognitive disability, this demonstrates true mastery. Only students who demonstrate Level 3 or Level 2 assessment tasks in the primary observation without prompting earn the opportunity to generalize by performing the same task using a change in materials. Students being assessed with Level 1 assessment tasks cannot earn the opportunity to generalize regardless of how well the predetermined criteria were performed. Students at Complexity Level 1 are demonstrating a beginning awareness level of performance that would not be appropriate for generalization.

Key points when planning the change in materials for the generalization observation:

- The change in materials should not make the difficulty of the task harder or easier than what was expected in the primary observation.
- The change in materials should address the content or skill being measured in the task.
- The same three predetermined criteria measured in the primary observation must be measured.
- The same supports and response modes used in the primary observation must be used.
- The generalization observation must be conducted on a different day than the primary observation.
- The change in materials should require the student to provide a different answer to the predetermined criteria than was observed during the primary observation.
- The generalization observation can only be provided three times and the best performance is evaluated in the Assessment Management System.
- The date of the observation, the student's performance during the observation, and the change in materials used for generalization must be recorded on the state-required documentation form.

STAAR Alternate Documentation Form of Student Performance		Science Grade 8
Student Name: Jenee		School Year: 2012-2013
<p><small>Instructees' descriptions should include the date and specific information regarding evidence of student performance and any cues or prompts that were given. Add the date, any cues or prompts, and evidence of performance for Generalization of Skill, if applicable. Researched supports from the first page of this document should not be referenced here.</small></p>		
Predetermined Criteria	Date of the Primary Observation: March 6, 2013 <small>(Information for the evaluated observation only.)</small>	Date of the Generalization of Skill: March 13, 2013
1. The student will locate two places on the map with significantly different temperatures.	Dimension of Skill Jenee pointed to Billings, MT, and then to Miami, FL.	Dimension of Skill Jenee pointed to Minot, ND, and San Antonio, TX.
	Level of Support Independently	Level of Support Independently
2. The student will compare the temperature and precipitation in both places for the same three-day period.	Dimension of Skill Jenee accessed the forecasts for both cities, printed them out, and highlighted the temperatures and rainfall for each city's forecast. Jenee used the city/state index cards to label the circles on the Venn. She pointed to the middle of the Venn and said, "Cloudy every day." Jenee pointed to the Miami circle and said, "Storm." She pointed to the Billings circle and said, "Rain." After looking at the temperatures, Jenee said, "Miami hot" and "Billings cold."	Dimension of Skill Jenee accessed the forecasts for both cities, printed them out, and highlighted the temperatures and rainfall for each city's forecast. She placed each city/state card on the Venn diagram as labels. Jenee pointed to the middle of the Venn and said, "Some sun." Jenee pointed to the San Antonio circle and said, "No rain." She pointed to the Minot circle and said, "Rain." After looking at the temperatures, Jenee pointed to San Antonio and said, "Hot" as she fanned herself with her hand. Jenee shivered and said, "Sun" and pointed to Minot.
	Level of Support Jenee placed the Billings card on the Venn but needed a physical cue before adding the Miami card. After wait time and an indirect verbal cue, "What other information do you want me to put on the diagram?" was provided. Jenee saw the information about the rain but did not compare the temperatures. She responded when given the verbal direct cue, "Look at the temperatures and tell me what else to put on the diagram."	Level of Support Jenee stopped responding after the information on the rain was recorded. She was provided wait time and the verbal indirect cue, "What about the temperatures?" before stating how to complete the Venn.

Date

Performance

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Predetermined Criteria	Primary Observation	Generalization of Skill
3. The student will determine how to prepare for the weather at each location.	Dimension of Skill Based on the forecasts, Jenee responded with the appropriate clothing for each city using her communication device.	Dimension of Skill Jenee said she would take a bathing suit to San Antonio and an umbrella to Minot.
	Level of Support Independently	Level of Support Independently
Description of Materials/Approach Provided During Instruction		Description of the Change in Materials for Generalization
<p>Materials: Internet access; visual cards with steps on how to access information on the Internet; a variety of US maps on walls, in textbooks, and on the Internet; thermometer for measuring indoor and outdoor temperature; T-charts and Venn diagrams; voice-output device.</p> <p>Approach: Separate lessons on skills – Jenee was taught how to use a search engine to locate all kinds of information on the Internet. She was taught to follow a variety of directions outlined in steps on cards. During social studies she became familiar with all kinds of US maps and was able to locate cities. In mathematics she practiced using a thermometer to determine whether the temperature inside or outside was considered hot or cold. She worked on place value with numbers and ascending numbers. During language arts she was taught how to complete T-charts and Venn diagrams and how to use them to compare information in texts. In science, Jenee was instructed on different weather conditions, their impact on people and the environment, and how people should prepare for the different weather conditions.</p>		<p>Jenee was asked to locate two new cities with greatly differing temperatures on the same weather map that was used during the primary observation. As a result, the weather information she was asked to compare was different and the responses to the predetermined criteria varied from the primary observation.</p>

Change in Materials

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Requirement Options
Essence Statement A: Models and solves addition and subtraction problems					
3/Math	1/3.3	3	Addition equations	Given the number sentence $__? __ =$ (a predetermined sum) and two sets of objects in which each set has the same number of objects as the predetermined sum: determine the number of objects to use from each set to create an addition equation, determine the needed operation (+), record the number sentence	Use a new predetermined sum resulting in a different number sentence
3/Math	1/3.3	2	Addition equations	Given a real-life addition problem and two sets of objects: count the objects in each set, identify the needed operation to combine the sets (+), identify the sum of the combined sets	Use a new addition problem and different amounts of objects in each set
3/Math	1/3.3	1	Adding more	Given a set of objects and an empty container: experience zero objects, participate in adding each object to the container, acknowledge all of the objects	Not Appropriate
Essence Statement B: Identifies and uses patterns to solve problems					
3/Math	2/3.6	3	Extending patterns	Given a collection of ten dimes, nickels, and pennies and the scenario to purchase an item for a given price using identical coins without receiving change: determine the needed coins, determine the pattern, and determine the amount when two more coins are added to the pattern	Use a new scenario and an item with a different price requiring a different identical coin pattern
3/Math	2/3.6	2	Extending patterns	Given a real-life problem to create a decorative item with an ABC pattern and items arranged in an ABC pattern: identify the pattern, reproduce the ABC pattern, supply another strand in the pattern	Use a new problem with different items arranged in a different configuration (horizontal, vertical, circular) of an ABC pattern
3/Math	2/3.6	1	Patterning	Given a real-life problem requiring participation in making a decorative item with an AB pattern: explore the A and B items separately, participate in creating the AB pattern, respond to the completed decorative item	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill focus	Assessment Task Summary	Generalization Options
Essence Statement C: Uses measurement to solve problems					
3/Math	4/3.11	3	Comparing measurements	Given a real-life problem in which the student is determining which items will fit between two shelves: select an appropriate tool for measuring length, measure the height of the space between the shelves, measure items to determine which ones will fit on the shelf	Use shelves with a different height between the shelves and new items to be placed on the shelf at different heights than measured in the primary observation
3/Math	4/3.11	2	Ordering measurements	Given a real-life problem to identify which items will fit between two shelves: assist in creating a measurement tool the exact height of the shelves, identify which items will fit on the shelf, arrange the items in order from tallest to shortest on the shelf	Use shelves with a different height between the shelves, a different measurement tool, and new items to be placed on the shelf with different heights than previously measured
3/Math	4/3.11	1	Ordering lengths	Given a short-sleeve shirt and a long-sleeve shirt: explore the two shirts to recognize the amount of the arm that is covered, acknowledge the short sleeves, respond to the long sleeves	Not Appropriate
Essence Statement D: : Use data to solve problems					
3/Math	5/3.13	3	Organizing data on a graph	Given a set of simple data and an unlabeled graph: determine the labels for the graph, record the data on the graph, answer a question about the graph	Use new data resulting in different labels for the graph and a different question
3/Math	5/3.13	2	Organizing data on a graph	Given objects or representations to sort into three categories, a three-column graph, and five labels for possible categories: supply the labels for the three categories on the graph, arrange the objects or representations on the graph according to category, answer a question about the data on the graph	Use different objects or representations categorized differently resulting in a different question
3/Math	5/3.13	1	Organizing data on a graph	Given three identical objects: explore the objects, participate in placing each object on a graphic display one at a time, experience the three objects placed together in the graphic display	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement A: Uses place value to demonstrate understanding of numbers					
4/Math	1/4.1	3	Ordering numbers	Given a group of at least 30 objects already divided into three groups, each containing a different number of objects and no group having more than 15 objects: determine the number of objects in each group, record the number of objects in each group on a given number line containing only hash marks representing numbers one to fifteen, record the missing numbers on the number line	Use a new number of total objects resulting in different group amounts
4/Math	1/4.1	2	Ordering numbers	Given three groups of objects, two groups having less than ten objects and one group having ten or more objects: count the objects in each group, identify the written number that corresponds to the quantity in each group, identify the group with the “most”	Use new groups with different amounts
4/Math	1/4.1	1	Counting	Given two groups of objects, one group having one object and the other group having 10 objects: explore the number of objects in each group, participate in pairing the written number that corresponds to the quantity in each group, acknowledge the group that has “more”	Not Appropriate
Essence Statement B: Recognizes relationships between sets					
4/Math	2/4.7	3	Determining patterns	Given a real-life situation in which a given set of items is to be distributed with one item to each location; however, the number of locations will exceed the number of items: conclude that the task cannot be completed, determine the number of times the pattern will need to be extended for each location to receive an item, determine how many items will need to be provided at the beginning of the next delivery to the same locations	Use a new situation involving different items to be distributed one item to each location requiring a different extension of the pattern
4/Math	2/4.7	2	Extending patterns	Given ten containers in a row in which the first few containers have one item; identify how many objects are in each container, identify how many objects are needed to supply the remaining containers with one object, assist in placing one object in each remaining container to complete the pattern	Use a different number of filled containers resulting in a new number of items needed for completion
4/Math	2/4.7	1	Patterning	Given three empty containers and three identical objects: participate in placing the first and second objects paired with a sensory experience into the first and second containers, anticipate that an object needs to be added to complete the pattern, participate in completing the pattern	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement C: Uses attributes to identify geometric figures					
4/Math	3/4.8	3	Geometric attributes	Given a wide array of real-life objects in the shape of three-dimensional geometric figures: classify the objects by geometric attributes, justify the way the classifications were made, locate one more object for each group of geometric figures from objects in the classroom environment	Use a new array of objects focusing on different geometric attributes than used during the primary observation
4/Math	3/4.8	2	Geometric attributes	Given four real-life objects in the shape of three-dimensional geometric figures, one of which is a cylinder: identify the cylinder, identify the shape of the cylinder's base, identify one attribute for each of the remaining three-dimensional geometric figures	Use new real-life three-dimensional objects with different shapes than previously presented with the cylinder
4/Math	3/4.8	1	Geometric attributes	Given identical two-dimensional geometric figures that when joined together form a new geometric figure and a template of the new figure that is formed: explore the figures, participate in placing the two-figures on the template to form the new figure, acknowledge the entire surface of the new figure	Not Appropriate
Essence Statement D: Use temperature and time to solve problems					
4/Math	4/4.12	3	Measuring temperature	Given a real-life problem that requires measuring the temperature for a specific purpose: select a tool for measuring temperature from a wide array of measurement tools, measure temperature using the thermometer, generate a conclusion about the temperature	Use a new problem and purpose resulting in a different measurement and conclusion
4/Math	4/4.12	2	Temperature	Given three containers of water, one with chilled water, one with room-temperature water, and one with warm water, in random order: examine the water in each container, arrange the containers in order from warmest to coldest, match each container to a representation for "warm," "cold," or "room temperature"	Use different containers with different sizes and shapes than previously used
4/Math	4/4.12	1	Ordering degrees of temperature	Participate in gathering cold and warm objects from typical storage locations, respond to the cold objects, respond differently to the warm objects	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement A: Models and solves addition, subtraction, multiplication, and division problems					
5/Math	1/5.3	3	Subtraction equations	Given a set of objects in a quantity equal to a two-digit number: generate a subtraction problem, generate a corresponding number sentence, generate an addition number sentence to check the answer	Use a different amount of objects in the set resulting in different number sentences
5/Math	1/5.3	2	Subtraction equations	Given a group of objects and the following number sentence $_ - _ = _ :$ identify the total amount of objects in the group, count how many objects were removed, complete the number sentence	Use a different amount of objects in the group and a different number of items removed
5/Math	1/5.3	1	Subtracting	Given a container of objects: experience the total number of objects, participate in removing all but one object from the container, experience the one object that remains	Not Appropriate
Essence Statement B: Uses attributes to identify geometric figures					
5/Math	3/5.7	3	Geometric attributes	Given different-sized envelopes and business letters all written on the same size piece of paper to be folded to fit into the envelopes then opened and marked according to folds: determine the minimum number of folds needed for each business letter, determine the types and number of shapes that were formed for each folded letter, compare the number of folds needed for each letter	Use new letters and envelopes of different sizes resulting in a different number of folds
5/Math	3/5.7	2	Geometric attributes	Given three different, large two-dimensional geometric figures: identify each figure, identify the number of sides for each figure, match three smaller figures with the same shape as the large figure to the larger figures	Use three new two-dimensional geometric figures with a different number of sides than used during the primary observation
5/Math	3/5.7	1	Geometric attributes	Given a template of a place setting with the shape of a napkin, shape of a plate, and the base of a glass: explore each outlined shape on the template, explore the shape of each piece of tableware, participate in placing each piece of tableware on its corresponding shape	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement C: Uses measurement to solve problems					
5/Math	4/5.10	3	Capacity	Given a real-life problem to determine whether one large container or several small containers of the same product is a better buy and a large container and other small, identical containers all of which are empty (the total capacity of the combined small containers will equal the capacity of the large container): determine the total number of cups to fill the large container and each small container, compare the quantities, determine the better buy when given the price for the large container and the price for each of the small containers	Use new large and small containers, different prices, and a new problem resulting in a different total number of cups needed to fill the large container
5/Math	4/5.10	2	Capacity	Given a real-life problem to serve equal portions of a beverage to a given number of people and three containers with different shapes, different capacities, and similar sizes: count the number of servings for each container after pouring the contents of the containers into uniform cups, identify the containers with the most and least servings, identify which container best meets the need to serve the given number of people	Use new containers with different shapes and sizes for a different number of people resulting in a different total of cups needed to fill the large container
5/Math	4/5.10	1	Capacity	Given two containers with significantly different capacities: explore the two containers, participate in filling each container, acknowledge the container that holds "more"	Not Appropriate
Essence Statement D: Displays and solves problems using data					
5/Math	5/5.13	3	Graphing	Given a real-life problem to determine the most profitable time to sell a product and related unorganized data: determine the number of products sold during three times of day, generate a graph to display the data, determine the most profitable time to sell the product	Use new data to be graphed requiring a different time of day for best results
5/Math	5/5.13	2	Graphing	Given a graph with the total number of products sold during three different times of the day: identify the total number of products sold for each time period, identify the time when the fewest products were sold, identify the most profitable time	Use a new graph with new data resulting in different time of day for best results
5/Math	5/5.13	1	Graphing	Given a real-life problem in which an item will be sold over a two-day period to find the most profitable day: participate in labeling a graph with a representation for the two days, participate in placing items on the graph representing each item sold, acknowledge the category on the graph with more items	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement A: Uses numbers in a variety of equivalent forms					
6/Math	1/6.1	3	Place value	Given a collection of at least nine dimes to be used as a bank for trading and a collection of pennies totaling more than ten but not a multiple of ten: determine how many pennies can be traded for each dime, determine how many pennies are left after trading for dimes, record the corresponding two-digit number for the combined value of the dimes and leftover pennies	Use new coin totals resulting in a different two-digit number
6/Math	1/6.1	2	Place value	Given a two-digit number and a collection of dimes and pennies: identify the number of dimes and pennies that correspond to the number in the tens places and ones place, match coins to the tens place and ones place, count the value of each coin to reach the total value	Use a new two-digit number
6/Math	1/6.1	1	Counting	Given a one-digit number and the same number of objects: explore the objects, participate in placing the objects on top of the number, acknowledge the total number	Not Appropriate
Essence Statement B: Recognizes relationships involving geometric figures					
6/Math	3/6.6	3	Geometric attributes	Given two-dimensional and three-dimensional geometric figures: classify the figures by attributes, justify the way the groups were classified, determine a common attribute of two teacher-selected geometric figures	Use new two and three-dimensional geometric figures; teacher should select figures that when classified will result in at least one different attribute being determined than was used during the primary observation
6/Math	3/6.6	2	Geometric attributes	Given a three-dimensional geometric figure with faces: identify one face on the figure, identify a two-dimensional figure the same shape as the face on the three-dimensional figure, count the faces on the three-dimensional figure	Use a new three-dimensional geometric figure with a shape face different than used during the primary observation
6/Math	3/6.6	1	Geometric attributes	Given an empty box with a square and a circle opening cut out of one side: explore the shape of the openings, participate in sorting cylinders from cubes, participate in placing the cylinders and cubes in the appropriate openings in the box	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement C: Use estimation, unit conversions, and measurement to solve problems					
6/Math	4/6.8	3	Estimating weight	Given a non-standard unit that approximates one pound and a group of identical food items whose total weight is in excess of one pound: estimate the number of food items needed to equal the weight of the non-standard unit (1 lb.), determine the weight of the food items using a scale, evaluate the accuracy of the estimate	Use a new non-standard unit and different identical food items that will require a different number to approximate one pound
6/Math	4/6.8	2	Estimating weight	Given a packaged food item: examine the weight of the food item without weighing it, identify the best non-standard unit of measure for the food item, assist in using the non-standard unit to approximate the weight of the food item	Use a new food item and different non-standard unit options
6/Math	4/6.8	1	Estimating weight	Given items of varying weights and a device that is activated when a heavy item is placed on it: explore the light and heavy items, participate in placing each item on the device, respond to the heavy items when the weight activates the device	Not Appropriate
Essence Statement D: Uses probability to make predictions					
6/Math	5/6.9	3	Graphing trend lines	Given data that depicts a steady increase or decrease in number indicating a trend for a four-day period and a sequentially labeled graph: record the data points and the resulting trend line for the four days, predict what the data will most likely be for the fifth day, justify his or her prediction	Use new data to be graphed resulting in different data points and trend line
6/Math	5/6.9	2	Graphing trend lines	Given a graph that has data points for a four-day period that depicts a steady increase or decrease in number; complete the graph by connecting the data points to form a trend line, identify the current trend shown by the line, identify which direction the trend will most likely go	Use a new graph resulting in different data points and trend line
6/Math	5/6.9	1	Graphing	Given a graph showing representations of routine activities the student has done where one activity is repeated several times and paired with a sensory experience: explore the representations on the graph, respond to the sensory input provided as the graph is explored, anticipate the sensory input representing the most frequently occurring activity	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement A: Represents and uses numbers in a variety of equivalent forms					
7/Math	1/7.1	3	Fractions	Given a whole object and eight pieces that when put together form the whole object: generate one-fourth using the pieces, generate one-half using the pieces, record each fraction in its original form and in lowest terms	Use a new whole object in a different shape with different section configurations
7/Math	1/7.1	2	Fractions	Given an object divided into fourths but presented individually as equal-sized pieces: identify a model of a whole, identify a model of two-fourths, identify the fraction represented by the model of two-fourths	Use a new whole object in a different shape with different section configurations
7/Math	1/7.1	1	Fractions	Given a whole item to be divided in half to be shared: explore the whole item, participate in dividing the item in half, participate in sharing the item equally	Not Appropriate
Essence Statement B: Use equations to solve problems					
7/Math	2/7.5	3	Multiplication equations	Given a real-life problem in which he or she needs to determine how many packages of an item sold in quantities of 100 are needed for a number of people, in excess of 300 but not a multiple of 100: generate an equation representing the total number of items found in one package, generate multiplication equations to represent each time an additional package is needed until the problem is solved, determine how many packages will be needed	Use a new problem and a different number of people and packages
7/Math	2/7.5	2	Multiplication equations	Given a real-life problem in which he or she needs to identify how many packages of an item sold in multiples of 10 are needed for at least 50 people in multiples of ten and a list of multiplication equations that have the first two equations completed and represent the number of packages multiplied by 10 that equal the total number of items: complete the remaining equations, identify how many packages are needed for the given number of people, identify how many packages are needed for a greater number of people	Use a new problem and a different number of people and packages
7/Math	2/7.5	1	Addition equations	Given an equation ($1+1=2$) with objects representing each number in the equation: explore the equation with its corresponding objects, participate in increasing the first addend by one and changing the corresponding addend for two new equations as the teacher adds objects and numbers to represent the new sums, respond to the new equations	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement C: Uses coordinate geometry to locate and name points and graph reflections and translations					
7/Math	3/7.7	3	Points on a number line	Given a nonnumbered ruler with hash marks for inches and half-inches and an object that measures exactly to a half-inch interval: generate the number labels for the whole numbers on the ruler, generate the number labels for the mixed numbers on the ruler, measure an item to the half-inch	Use a new object that measures to a different half inch than used during the primary observation
7/Math	3/7.7	2	Points on a number line	Given a ticket indicating a row and seat number: identify his or her seat in the row, identify a seat with a lower seat number, identify a seat with a higher seat number	Use a different ticket for another location that has a different row and seat number
7/Math	3/7.7	1	One-to-one correspondence and math language	Given three objects: explore the objects, participate in placing the objects horizontally in adjacent containers, acknowledge the objects that were placed in a line as the teacher uses informal language describing the placement	Not Appropriate
Essence Statement D: Uses estimation and measurement to solve problems					
7/Math	4/7.9	3	Measuring perimeter	Given a real-life problem comparing the perimeter of two rectangles (one having longer side lengths than the other): select a tool for measuring perimeter from a wide array of tools, determine the perimeter of each rectangle, compare the perimeters of the two rectangles	Use a new problem and two different rectangles resulting in different perimeters
7/Math	4/7.9	2	Measuring with non-standard units	Given a 12-inch ruler: choose a non-standard measurement tool that approximates the length of the ruler, assist in measuring an item greater than one foot with the non-standard tool, identify the length in non-standard units	Use a new non-standard measurement tool and an item with a different length than used during the primary observation
7/Math	4/7.9	1	Measuring length	Given two objects of the same length and one object of a different length arranged so that the lengths can be easily compared: explore the length of each object, acknowledge the two objects that are the same length, respond to the object of a different length	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement A: Solves problems using operations					
8/Math	1/8.2	3	Division and multiplication equations	Given a real-life problem in which a given number of objects needs to be shared equally and a group of objects equal to a two-digit number that can be divided without a remainder: generate a division problem using the objects, generate a corresponding equation, generate a multiplication equation to check the answer to the division problem	Use a new problem and a different number of objects resulting in different division and multiplication equations
8/Math	1/8.2	2	Division equations	Given a real-life problem in which a given number of objects needs to be divided into equal groups: arrange the objects into a specified number of equal groups, identify the number of objects in each group, identify an equation that represents the problem	Use a new problem and a different number of objects resulting in a different division equation
8/Math	1/8.2	1	Division	Given objects to be divided equally into two groups for sharing: participate in dividing the objects equally into two groups after exploring them, respond to each equal group of objects, participate in sharing the objects	Not Appropriate
Essence Statement B: Estimates and solves problems involving proportional and non-proportional relationships					
8/Math	2/8.3	3	Patterns in multiplication	Given a real-life problem in which three items are needed per person for a specified number of people: record a corresponding multiplication equation, determine the total number of items needed for the number of people, generate another equation when the number of people is increased	Use a new problem and a different number of people needing three new items
8/Math	2/8.3	2	Patterns in tables	Given a partially completed table that when completed will show the total number of the same kind of coins needed to purchase an item for a specified amount: identify the pattern, complete the table, identify the total number of coins needed to purchase the item	Use a new table and different specified amount requiring a different coin to establish a different pattern
8/Math	2/8.3	1	Large and small quantities	Given a real-life problem in which a large quantity of the same item is needed: explore one item paired with the number "1", experience 100 items that are identical to the original item and paired with the number "100," respond to the larger amount	Not Appropriate

MATHEMATICS

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Essence Statement C: Uses transformational geometry					
8/Math	3/8.6	3	Translations and rotations	Given one real-life object positioned by the teacher and other objects requiring a translation or rotation in order to be oriented like the first object: generate a rotation for each object that requires a rotation, generate a translation for each object that requires a translation, determine if a rotation or translation was performed	Use different objects in different orientations than used during the primary observation
8/Math	3/8.6	2	Symmetry and reflections	Given three two-dimensional figures, one that is symmetrical and two that are not symmetrical: assist in folding each figure to try to find a line of symmetry, identify the figure that is symmetrical, identify a part that can be added to one of the nonsymmetrical figures to make a reflection	Use new two-dimensional geometric figures with the symmetrical figure being different than previously used
8/Math	3/8.6	1	Positioning objects	Given an object to be placed with other like objects already positioned on a shelf: explore the part of the object that should be paced outward, participate in turning and placing the object properly on the shelf, participate in sliding the object next to the like objects	Not Appropriate
Essence Statement D: Displays and interprets relationships among data					
8/Math	5/8.12	3	Range and mode of data	Given a list of numbers in random order with at least two of the numbers being the same: organize the data in a list, determine the range of the data, determine the mode of the data	Use a new list of numbers not previously used
8/Math	5/8.12	2	Interpreting data in graphs	Given a pictograph with four categories of data displayed and a bar graph with the same data for three of the corresponding categories: match the displayed data from the pictograph to the displayed data on the bar graph, identify which category of data is missing, supply the missing data on the bar graph	Use new pictographs and bar graphs with new categories of data in different quantities
8/Math	5/8.12	1	Sorting and graphing data	Participate in collecting responses/objects to represent the results of a survey about a preference, participate in grouping the data by preference, acknowledge the data as it is placed on a real-object graph	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement A: Shows a basic understanding of functions					
Algebra I	1/1	3	Patterns in tables of data	Given a completed table showing the relationship between number of items sold and the total amount of money made for a specified amount (one column displays the number of items sold in increments of one and the second column displays the total amount of money made): generate a table to display the number of products sold at a new price and the total amount of money that would be made, compare the data in each table, generate a conclusion about how a change in price affects the amount of money made	Use a new table with a different number of items sold at a different price and a different total
Algebra I	1/1	2	Patterns in tables of data	Given a real-life problem in which products are sold for \$3.00 each along with a three column table labeled "Number of Products," "Cost of One Product," and "Total Earned": identify the pattern in the first three rows of the table, choose the operation that was used between the first and second column to arrive at the totals, complete another row to extend the table	Use a new table with a different number of items sold and a different total to be earned
Algebra I	1/1	1	Patterns in addition problems	Given objects each of which can be separated into two parts and a number sentence ($1+1=2$) with objects representing each number: experience the objects for each number in the presented equation, participate in separating the objects into two parts, participate in placing the separated objects into a new number sentence ($2+2=4$), experience the objects representing the new equation as the teacher counts by twos	Not Appropriate
Essence Statement B: Uses mathematical skills to simplify expressions and solve problems					
Algebra I	2/4	3	Multiplication and division	Given a simple recipe without fractions that makes six servings: generate an equation for adjusting one ingredient for 12 servings, generate a second equation for adjusting one ingredient for three servings, solve both equations	Use a new recipe with different ingredient amounts resulting in different equations
Algebra I	2/4	2	Multiplication	Given a specified number of servings that total a two-digit number: identify a multiplication equation that represents the student arrangement of servings in equal rows, construct a new arrangement of servings into equal rows, identify a multiplication equation that represents the new arrangement	Use a new number of servings that total a different two-digit number
Algebra I	2/4	1	Combining sets	Given three objects in a row: participate in counting the objects, participate in creating another identical row when given three more objects, respond to the set of objects when combined and counted as a total	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement C: Understands different representations of linear functions					
Algebra I	3/5	3	Solving problems using tables	Given a real-life problem in which the student works at a job, earns a specific amount an hour, and works a specific number of hours each day: determine how much is earned each day, generate a graph or table to show the total earned each day for five days, generate an equation to show the total earned for the five days	Use a new job earning a different amount per hour for a different number of hours per day
Algebra I	3/5	2	Using data in tables	Given a real-life problem requiring the student to find the cost of riding the bus for five days and a two-column table with four completed rows (one column displays the number of days and the other column displays the cost): identify the cost of riding the bus for one day, identify the cost of riding the bus for three days, complete the table supplying the cost of riding the bus for five days	Use a new bus fare and corresponding two-column table
Algebra I	3/5	1	Fact families	Participate in a task that earns the student a dollar which can be exchanged for a preferred activity, participate in pairing the dollar with the equation $0 + 1 = 1$, acknowledge the equation $1 - 1 = 0$ that represents the exchange	Not Appropriate
Essence Statement D: Solves quadratic equations in a variety of ways					
Algebra I	5/10	3	Graphing trends in data	Given a table that contains data for product sales for a 5 day period where the data for the first three days shows a gradual increase in sales and the fourth and fifth days show a gradual decrease: generate a graph and plot the data points, generate the line connecting the data points, evaluate the sales data	Use a new table and partially completed graph containing different product sales totals than used during the primary observation
Algebra I	5/10	2	Graphing trends in data	Given a table that contains product sales that change in increments of 100 over a five day period (data for the first day and second day will show a gradual increase, the third day sales will peak, and the fourth and fifth day will show a gradual decrease) and a partially completed graph representing a portion of the data from the table: complete plotting the remaining data from the table on the graph, construct a curve connecting the data points, identify a true statement about the sales results represented in the graph	Use a new table and partially completed graph containing different product sales totals than used during the primary observation
Algebra I	5/10	1	Creating graphs	Given nine identical squares to be placed in a series of columns; participate in placing one square in the first column, two squares in the second column, and three squares in the third column to represent a gradual increase; participate in placing two squares in the fourth column and one square in the fifth column to represent a gradual decrease, experience the curve as the teacher emphasizes the curve created by the data	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement A: Recognizes the foundations of geometric concepts					
Geometry	1/1	3	Measuring and determining area	Given two rectangles (the second rectangle should have two of the sides the same length as the first rectangle but an increased length of the other two sides) and a wide array of measurement tools: select a tool for measuring length, determine the area for both rectangles, conclude how increasing the lengths of any of the sides of the rectangles affect the area	Use new rectangles with different lengths than previously used
Geometry	1/1	2	Measuring perimeter	Given a tool for measuring length and a rectangular object in which the side lengths are whole numbers: identify the formula used for finding perimeter, assist in measuring the sides of the rectangular object, identify the perimeter of the rectangular object	Use a new rectangular object with different side lengths than used during the primary observation
Geometry	1/1	1	Measuring length	Given a yardstick and three 12-inch rulers with unique physical characteristics: explore the length of the yardstick, participate in placing the rulers end-to-end next to the yardstick, experience the length of the three combined rulers in relation to the length of the yardstick	Not Appropriate
Essence Statement B: Uses different representations for geometric relationships and solves problems					
Geometry	2/4	3	Using right angles and lines of symmetry	Given a collating task and a collection of papers of different sizes and shapes presented in disarray: determine which papers have at least one right angle, organize the papers so that one right-angled corner per sheet is aligned, determine where to place the papers along the line of symmetry in an open folder	Use a new collection of papers that vary in size, shape, and amount than previously used
Geometry	2/4	2	Using right angles and congruent figures	Given an object with a base that is a right triangle to place in a storage container with a square base: match the right angle of the object's base to one of the right angles of the container's base to place the object in the container, choose an object that has a base that is congruent to the base of the object already placed in the container from objects that have varying bases, arrange the object to fit in the container	Use a new object and different sized storage container than used during the primary observation
Geometry	2/4	1	Symmetry	Given square shaped napkins: explore the four right-angle corners of the napkins, participate in folding the napkins diagonally along the line of symmetry, respond to the triangular-shaped napkins	Not Appropriate

MATHEMATICS

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Assessment Task Summary	Generalization Options
Essence Statement C: Uses geometric representations to solve problems					
Geometry	3/6	3	Parallel and perpendicular lines	Given a city map and a real-life problem in which the student needs to locate the streets surrounding a designated area: locate a designated area on the map, locate two parallel streets adjacent to the designated area, locate two parallel streets that are perpendicular to the original two streets	Use a new map and real-life problem and a different designated area
Geometry	3/6	2	Parallel and perpendicular lines	Given a portion of a map and one street clearly emphasized: construct a model of parallel and perpendicular lines using manipulatives, identify a street that is parallel to the emphasized street using the model, identify a street that is perpendicular to the emphasized street forming an intersection	Use a new map and a different emphasized street
Geometry	3/6	1	Attributes that enhance movement	Given spheres and cubes placed one at a time on a inclined plane: explore the geometric figures, respond to the figures that roll down an inclined plane, participate in grouping the figures by attributes	Not Appropriate
Essence Statement D: Uses the concept of congruence in geometric figures					
Geometry	4/10	3	Transformations	Given a wide array of two-dimensional geometric figures some of which are the same size and shape but others are not: select two geometric figures that are reflections of each other, determine how to orient the two figures so that they are reflections of each other, generate a reflection of the figures after the teacher has changed the orientation of one figure by using the other figure	Use new two-dimensional geometric figures and differently oriented teacher figure
Geometry	4/10	2	Symmetry	Given different lids that vary in both size and shape that are grouped by the student by shape: identify the definition of the word "congruent", identify which group of lids is the appropriate shape for the opening of each container, identify which lid is the right size for the opening of each container	Use new lids and containers of different shapes and sizes
Geometry	4/10	1	Positioning objects	Given a large envelope that can fit in a mail slot only one way: participate in attempting to place the envelope into the mail slot when the envelope is not positioned correctly to do so, participate in rotating the envelope so that it will fit in the mail slot, respond as the envelope as it is successfully placed in the mail slot	Not Appropriate