Task Specific Change in Materials/Approach from Instruction to Assessment: Mathematics

In order to provide more rigor as required by Texas legislation, the materials used in STAAR Alternate assessment observations must be different than those used during instruction. The materials must vary enough from instruction so that the student is not just rotely repeating an answer or response from a previous instructional session without truly demonstrating the skill. The changes in materials, therefore, should be related to the content being measured. During the assessment observation a student must provide a different answer to the predetermined criterion or respond to a different experience in the predetermined criterion than was observed during instruction. Because some tasks and predetermined criteria are written specifically for a certain skill, teachers need to plan instruction and assessments in advance to ensure a change in materials is made. For example, when specific skills are to be assessed, it may be necessary to introduce and teach similar skills during instruction so that the content of the assessment observation is not compromised.

Instruction is critical since an assessment observation only reflects the skill acquisition that occurred during the instructional process. The assessment tasks have to be presented as written and cannot be changed, thus maintaining the standardization quality of STAAR Alternate. A student's performance can only be considered valid if the assessment task has not been previously practiced in the exact way that it was designed. Therefore, teachers must review the assessment tasks prior to beginning instruction to ensure the task is not duplicated, which will compromise the authentic response required during the assessment observation. Teachers are required to approach teaching sessions differently than assessment observations. The change in approach may vary from assessment task to assessment task.

Question to ask yourself: What is the best way for the skills/concepts in the assessment task to be addressed during instruction?			
Answers:			
As the skill naturally occurs	In separate lessons	With new items only	In a different presentation

The information on the following page provides guidance on the instruction for the assessment task that should occur before the observation. The change in materials must maintain the complexity level of the task and result in a new experience or a different answer than is requested in the assessment observation.

Instructional Focus				
	Natural Occurrences	**Separate Lessons**	**New Items***	**Different Presentations**
Skill/Concept	• Broadly addressed as the skill/concept naturally occurs • Exposure to numerous experiences showing how the skill/concept relates to the student	• Specifically taught in isolation of other skills due to the complexity of the skill/concept • Requires the use of new items presented in the same way as in the predetermined criteria	• Specifically taught with new items *	• Overall skill or concept taught but in a way that is different than that of the assessment task
Predetermined criteria	• Not specifically addressed during instruction since the opportunity to emphasize the skill/concept frequently occurs	• Each predetermined criterion is addressed in isolation of the other predetermined criterion since each skill/concept must be learned individually as a separate skill/concept before being demonstrated together • Each predetermined criterion becomes a single, separate lesson which can occur over numerous days	• Each predetermined criterion is addressed in the same way as in the assessment task • All predetermined criteria are addressed together during a single lesson since the skill is often a process that cannot be completed until all three criteria are performed	• Not specifically addressed during instruction since the predetermined criteria are often very specific • Repeating the predetermined criteria during instruction exactly as written in the task would compromise the assessment observation
Entire assessment task	• Not presented as written during instruction – presented for the first time as an entire task during the assessment observation	• Not presented as written during instruction – becomes a culminating activity for the first time as an entire task during the assessment observation	• Presented as written during instruction – instruction and assessment observation are exactly mirrored with the exception of the items	• Not presented as written during instruction – presented for the first time during the assessment observation

* The term "item" refers to materials as well as to specific examples or problems presented in a task. An "item" refers to, but is not limited to, the following examples: consonant letter, word, paragraph, text, topic, equation, geometric figure, graph, quantity, journal entry, map, act of a good citizen, geographic feature, investigation, characteristic of a habitat, and a basic need.

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ■

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Uses place value to demonstrate understanding of numbers						
3/Math	1/3.1	3	Place value	⬤	Use three new sets of single units totaling different amounts greater than ten	Given three sets of single units each totaling a different amount greater than ten: organize the single units in each set into groups of tens and ones, determine the two digit number representing the quantity of units in each set, organize the numbers from least to greatest
3/Math	1/3.1	2	Ordinal numbers	⬤	Use new items to form rows of different quantities	Given a classroom setting containing desks or items in rows: identify the first, second, and third rows; identify the first, second, and third desks or items in one of the rows; match number cards for first through third to the desks or items in a different row
3/Math	1/3.1	1	Ordinal numbers	★	Expose to experiences of waiting in line using language to describe the student's position in line as it naturally occurs	Given three cards labeled "1st," "2nd," and "3rd,": participate in pairing the cards respectively to the first and second persons in a line; acknowledge the "3rd" card when paired with him or herself while waiting his or her turn in line; participate in receiving a number card to indicate his or her current place in line each time he or she moves up in line; experience receiving an item or service resulting from being first in line
Essence Statement B: Uses geometric vocabulary to identify two- and three-dimensional figures						
3/Math	3/3.8	3	Geometric attributes	■	Provide instruction on two-dimensional geometric figures and the attributes of each	Given two different two-dimensional geometric figures: generate a list of attributes for each figure, determine one geometric attribute that is similar between the two figures, determine one geometric attribute that is different between the two figures
3/Math	3/3.8	2	Geometric attributes	■	Provide instruction on two-dimensional geometric figures and the attributes of each	Given an art design that includes at least three geometric figures: identify one of the geometric figures, choose the word or phrase that describes the geometric figure identified by the student, identify the same geometric figure in the classroom environment
3/Math	3/3.8	1	Geometric attributes	■	Provide experiences to interact with various two-dimensional geometric shapes	Given a circular object: explore the shape of the object as the object's geometric attributes are emphasized, participate in rolling the object, participate in finding a real object shaped like a circle in the environment

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ◼

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Identifies temperature and time						
3/Math	4/3.12	3	Measurement: time to half hour	▲	Instruct on setting and recording time on a clock to the hour and half hour	Given a digital clock set to a time to the hour and an analog clock: determine how to set the hands on the analog clock to display the time set on the digital clock, determine what the time will be in 30 minutes, record the time to the half hour
3/Math	4/3.12	2	Measurement: time on a calendar	◼	Provide instruction on finding the current date on various 12 month calendars	Given a 12 month calendar: identify the current month, identify the current date on a calendar, identify the current day of the week
3/Math	4/3.12	1	Measurement: passage of time	★	Expose the student to a daily schedule and to each activity on the schedule when it begins and ends	Respond to a representation for a specific activity on the schedule for the day, participate in the activity, participate in adjusting the schedule to indicate the activity/time period is over
Essence Statement D: Use data to solve problems						
3/Math	5/3.13	3	Organizing data on a graph	⬤	Use new data resulting in different labels for the graph and a different question	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
3/Math	5/3.13	2	Organizing data on a graph	⬤	Use different objects or representations categorized differently resulting in different quantities and a different question	Given objects or representations to sort into three categories and a three-column graph labeled with the three categories: sort the objects or representations into the three categories, arrange the objects or representations on the graph according to the labeled categories, answer a question about the data on the graph
3/Math	5/3.13	1	Organizing data on a graph	⬤	Use objects or representations from different categories	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

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ▢

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Models and solves addition and subtraction problems						
4/Math	1/4.3	3	Addition number sentences	⬤	Use a new problem with different concrete objects resulting in different addends	Given a real-life problem involving addition of numbers using concrete objects: generate a number sentence to represent the problem, generate a change to the problem affecting the addends after being instructed to do so by the teacher, generate a new number sentence to represent the change
4/Math	1/4.3	2	Addition number sentences	⬤	Use a new problem with sets of objects in different quantities resulting in different addends	Given a real-life problem involving addition and sets of objects modeling the problem: count the objects in each set, identify a number sentence to represent the problem, identify a new number sentence to represent a change made to the original problem
4/Math	1/4.3	1	Addition number sentences	⬤	Use new objects in sets of different quantities	Given a set of objects and a container to hold the objects: experience "zero" objects in the container as the teacher records "0" for the addend of a number sentence, participate in adding each object to the container as the teacher records "+1" on the number sentence, acknowledge all the objects in the container as the teacher records "=__" to reflect the sum
Essence Statement B: Recognizes relationships between sets						
4/Math	2/4.7	3	Determining patterns	⬤	Use a new situation involving a different quantity of items to be distributed one item to each location with a different number of locations used	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 why 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
4/Math	2/4.7	2	Extending patterns	⬤	Use a different number of filled containers resulting in a new number of items needed for completion	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
4/Math	2/4.7	1	Completing patterns	★	Expose to situations that require one-to-one correspondence to complete	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 when the third container is approached, participate in completing the pattern by adding the third object to the third container as a sensory experience is provided

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ▣

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Uses measurement to solve problems						
4/Math	4/4.11	3	Measurement: comparing weight	⬤	Use new items with different weights	Given a scale for measuring weight and at least five items each weighing a different whole-number amount: measure the weight of each item using the scale (weights will be recorded on individual cards), organize the weights listed on the cards from heaviest to lightest, determine which items have weights that fall between two whole-number amounts that have been predetermined by the teacher
4/Math	4/4.11	2	Measurement: comparing weight	⬤	Use new items with different weights	Given three cards labeled with "heavier than __pounds", "same as ___pounds", and "lighter than ___pounds" and a problem that requires identifying items that are heavier than, the same as, or lighter than a given whole-number amount: assist in weighing each item using a scale for measuring weight and items each weighing a different whole number amount, match the items with recorded weights to the cards, identify the items that are the heaviest and the lightest
4/Math	4/4.11	1	Measurement: comparing weight	★	Expose to opportunities to interact with objects of varying weights	Given several identical items of the same weight that can be easily stacked: experience the weight of one item that is placed on a part of the student's body, participate in stacking additional items on top of the first item, respond to the accumulated weight of all items
Essence Statement D: Uses data to solve problems						
4/Math	5/4.13	3	Graphing results	▣	Provide instruction on the structure of graphs and recording data on different types of graphs	Given a total number of days each of three students were present for one week and an unlabeled picture graph or bar-type graph: record the data on the graph, generate a title for the graph, determine who will receive the attendance award
4/Math	5/4.13	2	Collecting data	▣	Provide instruction on conducting and collecting data for surveys on a variety of topics	Assist in conducting a survey to decide which of three food choices is the most preferred to serve at a planned event, identify the total for each food choice, identify the food to be served at the event
4/Math	5/4.13	1	Grouping like objects	★	Expose to opportunities to put like objects together or move objects that do not belong in a given location	Given an empty container and three identical objects during a clean-up activity: explore the three identical objects, participate in placing each identical object into the container, participate in discarding a significantly different object from the original objects

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ◼

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Uses place value to demonstrate understanding of numbers
5/Math	1/5.1	3	Place value for money	⬤	Use a different amount of coins and bills	Given a set of coins and bills and the following template $\_\_.\_\_ \_\_$: organize the bills and coins by value, determine the total value of the set of coins and bills, record the monetary amount on the template
5/Math	1/5.1	2	Place value for money	⬤	Use a different amount of dimes and pennies	Given a collection of no more than 9 dimes and 9 pennies: sort the dimes and pennies into two groups, count the number of dimes and the number of pennies, identify the total recorded value of the coins
5/Math	1/5.1	1	Coin value	★	Expose to opportunities to purchase items with pennies and dimes	Given two identical items costing ten cents to purchase: explore the items, participate in counting ten presented pennies, participate in pairing the pennies with a dime, participate in purchasing one item with the ten pennies and the other item with the dime
Essence Statement B: Recognizes mathematical relationships using number sentences and diagrams
5/Math	2/5.6	3	Odd and even number patterns	⬤	Use a new diagram with different missing numbers	Given a diagram representing a street or hallway where locations are numbered with odd numbers on one side and even numbers on the other side (a few of the locations on both sides will be labeled with the correct number and the other numbers will be missing): locate one designated even-numbered location, locate one designated odd-numbered location, record the missing numbers for the other locations on both sides
5/Math	2/5.6	2	Even number patterns	⬤	Use a new number line ending with different missing even numbers	Given a number line emphasizing a pattern of consecutive even numbers: identify the pattern, supply the next two numbers in the pattern, count by 2s to a specified number using the number line
5/Math	2/5.6	1	Patterns	⬤	Use new items in a different pattern arrangement (vertical versus horizontal) or use sounds or textures in the patterns rather than concrete objects	Given items that will be used to represent an ABC pattern: explore the A, B, C items; participate in creating the ABC pattern; respond to the pattern after it is completed

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ◼

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Uses temperature and time to solve problems
5/Math	4/5.11	3	Future time	▲	Instruct on setting and recording time on a clock to the hour, half hour, and quarter hour	Given a time to an exact hour, half-hour, or quarter hour on a digital clock: determine how to set the hands on an analog clock to display the time on the digital clock, determine what the time will be in 15 minutes using the original time and the analog clock, record the new time
5/Math	4/5.11	2	Duration of time	⬤	Use new activities with different activities and time durations	Given three different activities to perform and a stop watch: assist in measuring the time it takes to complete each activity (the time will be recorded individually on cards), arrange the cards from shortest to longest duration, identify which activity took the most time to complete
5/Math	4/5.11	1	Duration of time	⬤	Use a new sequenced routine with different steps and time durations	Given three objects representing three steps of a sequenced routine (each step will be assigned a time limit for completion): participate in setting the timer for each step in the routine, participate in using the objects to perform the steps, respond each time the timer goes off
Essence Statement D: Displays and solves problems using data
5/Math	5/5.13	3	Organizing data and graphing	◼	Provide instruction on using unorganized data to generate graphs to solve problems	Given a real-life problem to determine the most profitable time to sell a product during the school day and related unorganized data: determine the number of products sold during three different times of day, generate a graph to display the data, determine the most profitable time to sell the product
5/Math	5/5.13	2	Interpreting a graph	◼	Provide instruction on using graphs to solve problems	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 of day
5/Math	5/5.13	1	Making a graph	◼	Provide instruction on creating graphs	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

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ▪

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Uses numbers in a variety of equivalent forms						
6/Math	1/6.1	3	Place value	⬤	Use new quantities of dimes and pennies resulting in a different two-digit number	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
6/Math	1/6.1	2	Place value	⬤	Use a new two-digit number	Given a two-digit number and a collection of dimes greater than the number in the tens place and pennies greater than the number in the ones place: identify the number of dimes and pennies that correspond to the number in the tens place and ones place, match the appropriate coins to the tens place and ones place, count the value of each coin to reach the total value
6/Math	1/6.1	1	Counting	⬤	Use a new one-digit number	Given a one-digit number and the same number of manipulatives: explore the manipulatives, participate in placing the manipulatives on top of the number, acknowledge the total number of manipulatives on the number
Essence Statement B: Uses symbols in equations						
6/Math	2/6.5	3	Patterns in equations	⬤	Use a different odd-numbered set of manipulatives	Given an odd-numbered set of manipulatives no greater than 19: organize the manipulatives into two unequal groups, generate an equation for addition using the two groups of manipulatives as addends, generate a new equation reflecting the student-switched manipulatives, generate two subtraction equations to complete the fact family
6/Math	2/6.5	2	Patterns in equations	⬤	Use new manipulatives in different row arrangements resulting in a different equation	Given an arrangement of manipulatives in rows of twos, fives, or tens: identify the number in each row; count the accumulated total of each row by twos, fives, or tens; match an addition equation to the arrangement of manipulatives
6/Math	2/6.5	1	Patterns in equations	★	Expose to opportunities to place objects in rows as the objects are counted in naturally occurring situations	Given four containers in a row and the number sentence 1+1+1+_=4 (the first three containers will have one manipulative inside each container and the last container will be empty): explore the manipulatives in the containers as the number is read in the equation, anticipate exploring the fourth container, participate in adding one manipulative to the last container as the number sentence is completed

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Natural Occurrences ★	Separate Lessons △	New Items ⬤	Different Presentations ◼

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Use estimation, unit conversions, and measurement to solve problems						
6/Math	4/6.8	3	Measurement: length	⬤	Use a new distance that is a multiple of three feet	Given a designated distance with a length represented by a whole number that is a multiple of three feet: determine the number of paces needed to measure the distance from beginning to end (number of paces will be recorded), measure the same distance using a one-foot ruler and again using a yardstick (measurements will be recorded), compare the three measurements
6/Math	4/6.8	2	Measurement: length	◼	Provide instruction measuring with a one-foot ruler and the amount of inches equivalent to one foot	Given three objects of different lengths with the longest object having a length of exactly one foot and numerous one-inch cubes: assist in measuring each object using one-inch cubes (the length of the object will be recorded in number of cubes), assist in measuring each object with a ruler (the length will be recorded in inches), identify the object that is equal to the one-foot ruler, identify a statement that describes how many inches are equal to one foot
6/Math	4/6.8	1	Measurement: length	◼	Provide instruction in measuring items with a ruler	Given a ruler: explore the length of the ruler, participate in placing twelve one-inch cubes end-to-end next to the ruler, experience the length of the twelve one-inch cubes in relation to the length of the ruler
Essence Statement D: Displays and solves problems using data						
6/Math	5/6.10	3	Probability	⬤	Use new spinners divided into a different number of equal parts	Given three identical blank spinners each divided into an even number of equal parts greater than or equal to four: determine how to mark one spinner so that the data would most likely produce one outcome when spun multiple times, determine how to mark one spinner so that the data would be less likely to produce one outcome when spun multiple times, determine how to mark one spinner so that the data would reflect that each of two outcomes would be equally as likely to occur after being spun multiple times
6/Math	5/6.10	2	Probability	⬤	Use new objects in groups of different quantities	Given a group of identical objects and a second group of identical objects that are different from the first group and has significantly more objects than the other group: count the number of objects in each group (all objects will be placed in a container), assist in drawing objects out of the container one at a time and recording the results as data (the objects will be placed back in the container after each draw), identify the object most likely to be drawn from the container on the next draw
6/Math	5/6.10	1	Probability	⬤	Use a different oriented graph (vertical or horizontal) and new objects	Given ten identical objects and a two-column graph where one column is labeled for graphing the identical objects and the other column will be labeled for a different object of which none will be provided: explore the ten identical objects (the objects will be placed into a container), participate in placing the objects on the graph, respond to the graph after several draws, anticipate the object that is most likely to be drawn from the container

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Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ◼

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Represents and uses numbers in a variety of equivalent forms						
7/Math	1/7.1	3	Fractions	▲	Instruct on fractions including the concept of whole, halves, and fourths; recording fractions; and reduction of simple fractions to the lowest terms	Given a whole object and eight individual equal-sized 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
7/Math	1/7.1	2	Fractions	⬤	Use a new whole object in a different shape with different section configurations	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
7/Math	1/7.1	1	Fractions	★	Expose to dividing items to share as they naturally occur	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
Essence Statement B: Uses various forms to represent a mathematical relationship						
7/Math	2/7.4	3	Patterns in mathematical relationships	⬤	Use a new city with different mileage and a different average miles per hour	Given a city that is several hours drive away from the student along with mileage between the two locations and the average miles per hour the car is traveling: determine the data for the first row of a two-columned table with the columns labeled "Hours" and "Miles Traveled," generate the data for each additional hour of travel and the corresponding number of miles traveled until the mileage to the destination is reached, determine the number of hours needed to reach the destination
7/Math	2/7.4	2	Patterns in mathematical relationships	⬤	Use a new scenario with a different goal resulting in different data for the table	Given a scenario in which an equal number of tasks must be completed each day, a goal for the total number of completed tasks, and a table of paired numbers with one column showing the number of days and the second column showing the total number of accumulated tasks completed: identify the relationship between the two columns after viewing the first two completed rows, complete the table until the goal is reached, identify the number of days needed to reach the goal
7/Math	2/7.4	1	Patterns	★	Expose to a calendar and language that describes school days and days at home as they naturally occur	Given a calendar of the current month that has two weeks completed with different representations attached for two types of days (school days and non-school days): explore each of the two representations, participate in adding enough representations to complete the third week on the calendar, experience the school day and non-school day pattern on the calendar

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Natural Occurrences ☆	Separate Lessons ▲	New Items ⬤	Different Presentations ◼

Essence Statement C: Uses geometry to model and solve problems						
Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
7/Math	3/7.8	3	Comparing geometric figures	◼	Provide instruction on faces and determining area of various three-dimensional figures	Given a collection of different sized two-dimensional squares and a three-dimensional cube in which the faces are the same dimensions as one of the squares in the collection: determine which square has the same dimensions as the face of the cube, compare the size of the wrapping paper for the two-dimensional square with the paper for the three-dimensional cube (the student will be provided one piece of wrapping paper that has been cut appropriately to cover the square and another cut to wrap the cube), conclude why one of the figures required more wrapping paper than the other
7/Math	3/7.8	2	Creating new geometric figures	◼	Provide instruction on attributes of geometric shapes	Given an empty box: assist in breaking down the box so that it can be flattened into a net of the box, identify the fold lines when the box is flattened, identify the resulting shapes
7/Math	3/7.8	1	Creating new geometric figures	☆	Expose to different geometric shapes as they occur in everyday items	Given a container and one item that has approximately the same dimensions and shape as the container: explore the shape of the container and the item, participate in placing the whole item in the container as the teacher uses geometric vocabulary (the item will be removed from the container and cut into new shapes that the teacher will identify), participate in placing the new shapes back into the container
Essence Statement D: Uses mean, median, mode, and range						
7/Math	5/7.12	3	Range and mode	▲	Instruct on interpreting graphs and determining the range and mode for given data	Given a completed bar graph with at least five bars not presented in ascending or descending order and two bars with the same values: determine the values for each bar, determine the range of the data represented by the values of the bars, determine the mode
7/Math	5/7.12	2	Mode	⬤	Use a new graph with bars representing different values resulting in a different mode	Given a completed pictograph or bar graph with at least four sets of data with two sets containing the same value: identify a definition for mode, identify the values for each set, identify the mode
7/Math	5/7.12	1	Mode	⬤	Use a differently oriented (vertical or horizontal) graph and new objects and sensory experiences in a new amount	Given a two-column graph with a significantly different number of objects in each column with the objects in one column providing the same sensory experience that will vary from the objects in the second column: acknowledge the graph, experience the column with the least objects, respond to the column with the most objects

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Natural Occurrences ☆	Separate Lessons ▲	New Items ⬤	Different Presentations ⬛

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Recognizes that numbers can be represented differently depending on the situation						
8/Math	1/8.1	3	Monetary value	⬤	Use new sets of bills and coins totaling different values	Given three sets of bills and coins with each set having a different total value: determine the value of each set, record the values using dollar signs and decimal points, organize the values from greatest to least
8/Math	1/8.1	2	Monetary value	⬤	Use items priced at new amounts and a new collection of coins using different coins and a different value	Given a collection of coins of at least two different denominations totaling less than one dollar: sort the collection by denomination, identify the total value of the collection of coins, (four differently priced items with displayed prices will be presented with one of the items costing over one dollar and the other three costing less than a dollar), identify which items he or she can purchase
8/Math	1/8.1	1	Coin equivalents	☆	Expose to opportunities to purchase items with pennies, nickels and dimes	Given three identical items each totaling ten cents and a collection of ten pennies, two nickels, and one dime along with three cards labeled 10 cents: explore the items to be purchased, participate in sorting the coins by their denominations, participate in pairing a card to each set of coins, participate in purchasing each item with the different combinations for ten cents
Essence Statement B: Uses various forms to represent a mathematical relationship						
8/Math	2/8.4	3	Patterns in multiplication	⬤	Use a different amount of objects in the rows	Given one row of objects: generate a multiplication equation that corresponds to the one row of objects; generate multiplication equations for two, three, and four rows each time an additional row of objects is added; compare the equations to determine the pattern
8/Math	2/8.4	2	Patterns in numbering	⬤	Use a new seating chart configuration with different numbered and unnumbered sections and a ticket with a different section number	Given an arena seating chart with no labeled rows or seats but with numbered and unnumbered sections: identify a pattern using the numbered sections in the seating chart, supply the missing section numbers, match a ticket for a specific section number to the corresponding section on the seating chart
8/Math	2/8.4	1	Patterns	☆	Expose to situations that involve the number of items increasing at a steady rate	Given a container: participate in labeling the outside of the container with "1," "10," and "100" as each trial is performed; participate in adding 1, 10, and 100 items into the empty container after each number is placed on the container and the previous items removed to begin a new trial; acknowledge the increased number of items after the 10 and 100 items have been placed in the container

MATHEMATICS

Natural Occurrences ☆	Separate Lessons △	New Items ⬤	Different Presentations ▣

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Uses transformational geometry						
8/Math	3/8.6	3	Translations and rotations	⬤	Use different objects in different orientations	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
8/Math	3/8.6	2	Symmetry and reflections	⬤	Use new two-dimensional geometric figures with the symmetrical figure being different	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
8/Math	3/8.6	1	Positioning objects	⬤	Use a new object	Given an object to be placed with other like objects already positioned on a shelf: explore the part of the object that should be placed outward, participate in turning and placing the object properly on the shelf, participate in sliding the object next to the like objects
Essence Statement D: Finds measurements of geometric figures						
8/Math	4/8.8	3	Finding area	⬤	Use a different size rectangular figure	Given a rectangular figure: select tools needed to measure the area of the figure, measure the length and width of the figure, determine the area of the figure
8/Math	4/8.8	2	Finding area	⬤	Use a different size square or rectangular figure	Given a square or rectangular figure containing gridlines that will allow square units to be placed within the individual cells: identify the number of square units needed to fill all of the cells of the figure, count the number of square units that make up the length and width of the figure, complete the formula for area using the measured length and width to confirm the area
8/Math	4/8.8	1	Area	⬤	Use a different size square or rectangular figure	Given a square or rectangular figure containing gridlines that will allow square units to be placed within the cells: explore the width and length of the grid and one small square unit, participate in placing additional small square units into the individual cells to completely fill the rectangular figure, participate in counting the total square units

MATHEMATICS

Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ▢

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Shows a basic understanding of functions						
Algebra 1	1/1	3	Mathematical relationships: fact families	⬤	Use new scenarios with different numbers of papers and folders	Given a scenario in which an equal number of papers must be distributed in a specified number of folders: generate a multiplication equation where the answer is the total number of papers needed to complete the task, execute the distribution of papers to represent the equation, generate a division equation representing the distribution of the papers, (the student will be presented a new scenario in which the number of papers and number of folders is reversed for the student to follow the same procedure to create the remaining equations for the fact family)
Algebra 1	1/1	2	Mathematical relationships: extending patterns	⬤	Use a new scenario with a different product and constant rate	Given a scenario in which a designated number of products are available on the first day of the week and used at a constant given rate each day: identify a subtraction equation representing the decrease in products for the first day, construct subtraction equations indicating the decrease each day, (the process of constructing equations will continue until the products are used up), identify the number of days it took to use the product
Algebra 1	1/1	1	Mathematical relationships: patterns	▢	Provide experiences that have the student purchasing multiple identical items and having to provide more money with each additional purchased item	Given a two-column chart large enough to hold actual items that represent numbers of items and the corresponding costs (the first row of the chart will be completed with one item placed in the first column and two one-dollar bills in the second column: explore the first row of the chart, participate in completing a second row with two items and four one-dollar bills and a third row with three items and three one-dollar bills, experience the pattern on the chart

MATHEMATICS

Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ▣

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement B: Uses properties and attributes of functions						
Algebra I	2/2	3	Mathematical relationships: using graphs	⬤	Use a new graph representing a new product with a different time increment and rate of production	Given a graph representing a number of products created per a specific time increment in which the number of products created will increase at the same rate for each time period (the *x* axis will be labeled with a unit of time and marked in increments of that time; the *y* axis will start at zero and will be labeled with "Number of Products" and marked in increments of one; the first four points will be plotted on the graph): determine the pattern displayed in the graph, predict the number of products that will be made in two more time increments, generate an equation to confirm his or her prediction
Algebra I	2/2	2	Mathematical relationships: paired numbers	⬤	Use a new product with a different number of products to be assembled	Given a series of compartments in a horizontal row labeled in increments of one and materials for identical two-piece products: assist in assembling one simple two-piece product and placing it in the first compartment (two additional two-piece products and then three will be assembled and placed in the second and third compartments; the process will be continued by the student until all the materials have been used), identify how many parts are needed to reach a specified number of two-piece products, identify an equation for the problem
Algebra I	2/2	1	Mathematical relationships: paired numbers	★	Expose to opportunities to match the number with the corresponding number of objects	Given one container with six identical objects and a two-column chart that has three cells in the first column of the chart filled in with the numbers 1, 2, 3 respectively: explore the six identical objects, participate in placing the quantity of objects in the cells of the second column to correspond with the numbers in the first column, acknowledge the increasing quantities of objects

MATHEMATICS

Natural Occurrences ★	Separate Lessons ▲	New Items ⬤	Different Presentations ▣

Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Understands different representations of linear functions						
Algebra I	3/5	3	Solving problems using tables	⬤	Use a new job earning a different amount per hour for a different number of hours per day	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
Algebra I	3/5	2	Using data in tables	⬤	Use a new bus fare and corresponding two-column table	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 5th row of the table supplying the cost of riding the bus for five days
Algebra I	3/5	1	Fact families	★	Expose to opportunities to receive money for a completed task in exchange for a preferred item or activity	Participate in a task that earns the student a dollar which can be exchanged for a preferred activity, acknowledge the dollar, participate in pairing the dollar with the equation $0 + 1 = 1$, acknowledge the equation $1 - 1 = 0$ that represents the exchange
Essence Statement D: Formulates and solves equations and inequalities of linear functions						
Algebra I	4/7	3	Linear functions: generating equations	⬤	Use a new problem with a different number of items and people	Given a real-life problem in which a specific number of items need to be divided among a given number of people: generate a division equation to represent the real-life problem, generate a multiplication equation to check work, generate a new equation for an increased number of people
Algebra I	4/7	2	Linear functions: paired numbers	⬤	Use a new scenario and table with a different number of people and number of needed items	Given a table of paired numbers where the first column of the table will be labeled "Number of People" and the second column labeled "Number of Items" and a scenario in which a given number of people need the same number of items (the first two rows of the table will be completed): complete the third row of the table, identify the equation that represents the process used to complete the third row, complete the fourth and fifth rows of the table using the equation
Algebra I	4/7	1	Patterns in equations	⬤	Use a new chart divided into a different number of equal sections with different sensory components	Given a pie chart divided into equal sections with each section having a different sensory component: explore each of the sensory components in the pie chart, participate in distributing each section of the pie chart to a different person, acknowledge a subtraction equation as it is built throughout the task