

Standardized Assessment Tasks for
STAAR Alternate

Grade 3 Mathematics

STAAR Reporting Category 1 – Numbers, Operations, and Quantitative Reasoning: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.	
TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations	Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations
<p>(3.3) Number, operation, and quantitative reasoning. The student adds and subtracts to solve meaningful problems involving whole numbers. The student is expected to</p> <p>(A) model addition and subtraction using pictures, words, and numbers; Supporting Standard</p> <p>(B) select addition or subtraction and use the operation to solve problems involving whole numbers through 999. Readiness Standard</p>	<p>Essence Statement A: Models and solves addition and subtraction problems.</p>

Level 3

Prerequisite skill: model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences

The student will be presented a number sentence for an addition equation in which the operation sign is not given:

$_ ? _ =$ (actual number of the predetermined sum)
--

The student will be presented two sets of objects in which each set has the same number of objects as the predetermined sum. The student will determine the number of objects to use from each set to reach the predetermined sum. The student will determine the operation needed to get to the predetermined sum. The student will record the addends and the operation sign on the number sentence to check the solution.

Predetermined Criteria

1. The student will determine the number of objects to use from each set to reach the predetermined sum.
2. The student will determine the operation needed to get to the predetermined sum.
3. The student will record the addends and the operation sign on the number sentence to check the solution.

Process skill: select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem

Level 2

Prerequisite skill: model and create addition and subtraction problems in real situations with concrete objects

The student will be presented a real-life problem involving addition. The student will be given two sets of objects. The student will count how many objects are in each set. The student will identify the operation needed to combine the sets. The student will identify the sum of the combined sets.

Predetermined Criteria

1. The student will count how many objects are in each set.
2. The student will identify the operation needed to combine the sets.
3. The student will identify the sum of the combined sets.

Process skill: communicate mathematical ideas using objects, words, pictures, numbers, and technology

Level 1

Prerequisite skill: use concrete models or make a verbal word problem for adding up to 5 objects

The student will be presented a set of objects and a container to hold the objects. The student will experience "zero" objects in the container. The student will participate in adding each object to the container. The student will acknowledge all of the objects in the container.

Predetermined Criteria

1. The student will experience "zero" objects in the container.
2. The student will participate in adding each object to the container.
3. The student will acknowledge all of the objects in the container.

Definitions/Examples for STAAR Reporting Category 2 (3.6) Essence Statement B

The following definitions clarify terms used in the grade 3 mathematics assessment tasks to ensure that the content of the tasks is understood. When appropriate, examples and nonexamples have been provided for further clarification. These are just examples and do not represent all the appropriate ways to test the skills in the STAAR Alternate assessment tasks.

Level 3: page 5

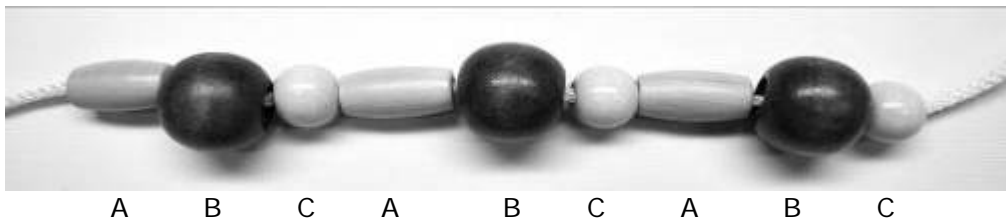
identical coins – coins of the same value/denomination.

- A student who uses all nickels to reach the value of \$.50 is using identical coins.
- Plastic coin manipulatives are NOT considered identical just because they are all made of plastic (identical material).

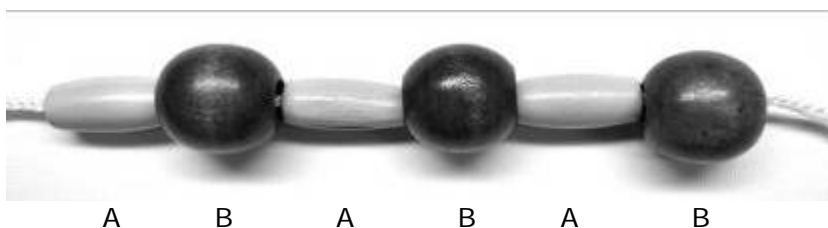
Levels 3, 2, and 1: pages 5 and 6

pattern – an arrangement that repeats according to a rule. There should be at least three repeating iterations/strands to establish a pattern.

- For the Level 3 task on page five, a pattern of 10 cents (1 dime), 10 cents (1 dime), 10 cents (1 dime) is appropriate. A pattern of 10 cents (2 nickels), 10 cents (1 dime), 10 cents (10 pennies) would NOT be appropriate for this task because this task requires the use of identical coins.
- For the Level 2 task, the student is expected to reproduce a pattern and supply another strand of a pattern to finish a decorative item. See the pattern example below of a completed decorative item with an ABC pattern:



- For the Level 1 task, see the AB pattern example below:



- For the Level 2 and Level 1 tasks, example decorative items include: note cards decorated with stamps in a pattern, bulletin board trim decorated with die-cuts in a pattern, or placemats painted with stripes in a pattern of colors.

STAAR Reporting Category 2 – Patterns, Relationships, and Algebraic Reasoning: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.	
TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations	Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations
<p>(3.6) Patterns, relationships, and algebraic thinking. The student uses patterns to solve problems. The student is expected to</p> <p>(A) identify and extend whole-number and geometric patterns to make predictions and solve problems; Supporting Standard</p> <p>(B) identify patterns in multiplication facts using [concrete objects,] pictorial models, [or technology;] Supporting Standard</p> <p>(C) identify patterns in related multiplication and division sentences (fact families) such as $2 \times 3 = 6$, $3 \times 2 = 6$, $6 \div 2 = 3$, $6 \div 3 = 2$. Supporting Standard</p>	<p>Essence Statement B: Identifies and uses patterns to solve problems.</p>

Level 3

Prerequisite skill: identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems

The student will be presented a collection of 10 dimes, 10 nickels, and 10 pennies. The student will be presented a situation in which he or she needs to purchase a specified item for a given price using identical coins without receiving change. The student will determine which identical coins can be used to reach the purchase price. The student will determine the pattern. The student will determine the amount when two more identical coins are added to the pattern.

Predetermined Criteria

1. The student will determine which identical coins can be used to reach the purchase price.
2. The student will determine the pattern.
3. The student will determine the amount when two more identical coins are added to the pattern.

Process skill: use tools such as real objects, manipulatives, and technology to solve problems

Transition

Mathematics Grade 3; Reporting Category 2 (3.6); Essence Statement: B

Level 2

Prerequisite skill: identify, extend, and create patterns of sounds, physical movement, and concrete objects

The student will be presented a real-life problem in which the student is creating a decorative item which requires an ABC pattern. The student will be presented objects arranged in an ABC pattern. The student will identify the pattern. The student will reproduce the ABC pattern. The student will supply another strand to finish the decorative item.

Predetermined Criteria

1. The student will identify the pattern.
2. The student will reproduce the ABC pattern.
3. The student will supply another strand to finish the decorative item.

Process skill: select or develop an appropriate problem-solving strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem

Transition

Level 1

Prerequisite skill: recognize and create patterns

The student will be presented a real-life problem in which the student is participating in creating a decorative item which requires an AB pattern. The student will be presented items that will be used to represent an AB pattern. The student will explore the A and B items. The student will participate in creating the AB pattern. The student will respond to the pattern in the completed decorative item.

Predetermined Criteria

1. The student will explore the A and B items.
2. The student will participate in creating the AB pattern.
3. The student will respond to the pattern in the completed decorative item.

Transition

Definitions/Examples for STAAR Reporting Category 4 (3.11) Essence Statement C

The following definitions clarify terms used in the grade 3 mathematics assessment tasks to ensure that the content of the tasks is understood. When appropriate, examples and nonexamples have been provided for further clarification. These are just examples and do not represent all the appropriate ways to test the skills in the STAAR Alternate assessment tasks.

Level 2: page 9

student-made measurement tool – a tool made to measure a specific space by a student assisting the STAAR Alternate teacher.

- To create a tool that is the exact height of the space between two shelves, a student could assist in cutting a length of yarn that is the height of the space. He or she could also use masking tape or put markings on a piece of paper that show the height of the space.
- For this Level 2 task, it is NOT appropriate for a student to create a complete yard stick, ruler, or measuring tape.

STAAR Reporting Category 4 – Measurement: The student will demonstrate an understanding of the concepts and uses of measurement.	
TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations	Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations
<p>(3.11) Measurement. The student directly compares the attributes of length, area, weight/mass, and capacity, and uses comparative language to solve problems and answer questions. The student selects and uses standard units to describe length, area, capacity/volume, and weight/mass. The student is expected to</p> <ul style="list-style-type: none"> (A) use linear measurement tools to estimate and measure lengths using standard units; Supporting Standard (B) use standard units to find the perimeter of a shape; Readiness Standard (C) use [concrete and] pictorial models of square units to determine the area of two-dimensional surfaces. Supporting Standard 	<p>Essence Statement C: Uses measurement to solve problems.</p>

Level 3

Prerequisite skill: compare and order two or more concrete objects according to length (from longest to shortest)

The student will be presented a real-life problem in which he or she is determining which items will fit between two shelves. The student will select an appropriate tool for measuring length from a wide array of mathematics tools. The student will measure the height of the space between the shelves using the selected tool. The student will measure the items using the selected tool to determine which ones will fit on the shelf.

Predetermined Criteria

1. The student will select an appropriate tool for measuring length.
2. The student will measure the height of the space between the shelves using the selected tool.
3. The student will measure the items using the selected tool to determine which ones will fit on the shelf.

Process skill: use tools such as real objects, manipulatives, and technology to solve problems

Transition

Mathematics Grade 3; Reporting Category 4 (3.11); Essence Statement: C

Level 2

Prerequisite skill: compare and order two or three concrete objects according to length (longer/shorter than, or the same)

The student will be presented a real-life problem in which he or she is deciding which items will fit between two shelves. The student will assist in creating a measurement tool the exact height of the space between the shelves. The student will be presented similar items of various heights. Some will fit on the shelf and some will not. Using the measurement tool, the student will identify which items will fit on the shelf. The student will arrange the items in order from tallest to shortest on the shelf.

Predetermined Criteria

1. The student will assist in creating a measurement tool the exact height of the shelves.
2. The student will identify which items will fit on the shelf.
3. The student will arrange the items in order from tallest to shortest on the shelf.

Process skill: use tools such as real objects, manipulatives, and technology to solve problems

Transition

Level 1

Prerequisite skill: recognize and compare heights or lengths of people or objects

The student will be presented two similar shirts, one short-sleeved and one long-sleeved. The student will explore the two shirts to recognize the amount of the arm that is covered. The student will acknowledge the short sleeves. The student will respond to the long sleeves.

Predetermined Criteria

1. The student will explore the two shirts.
2. The student will acknowledge the short sleeves.
3. The student will respond to the long sleeves.

Transition

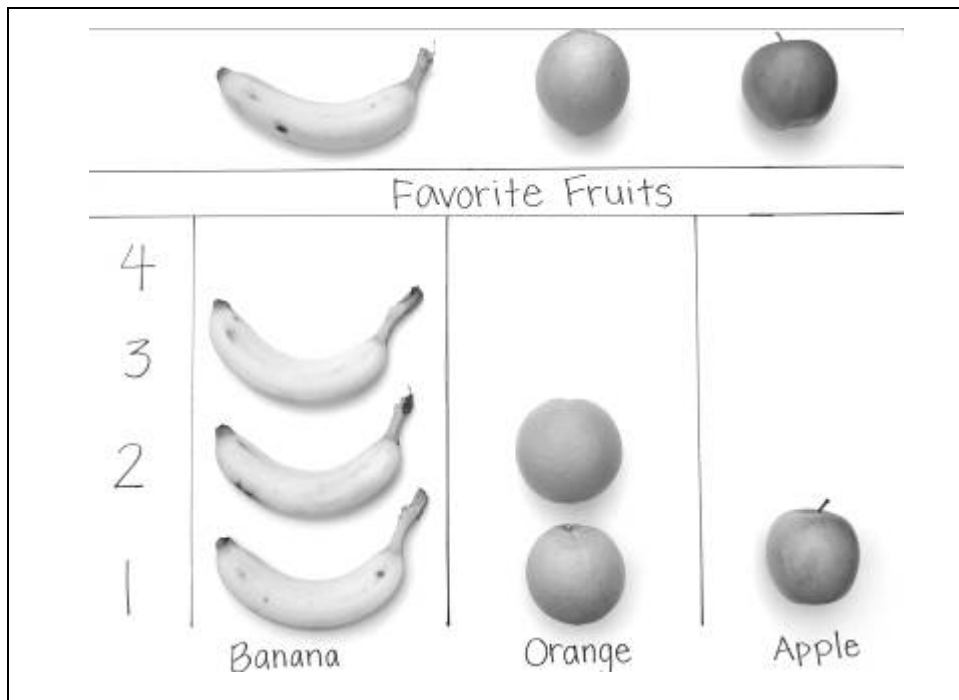
Definitions/Examples for STAAR Reporting Category 5 (3.13) Essence Statement D

The following definitions clarify terms used in the grade 3 mathematics assessment tasks to ensure that the content of the tasks is understood. When appropriate, examples and nonexamples have been provided for further clarification. These are just examples and do not represent all the appropriate ways to test the skills in the STAAR Alternate assessment tasks.

Level 2: page 12

three-column graph – a graph that displays three categories of data; can show photographs, pictures, or real objects as data.

- See example below:



Level 1: page 12

graphic display – any presentation that displays data; must show real objects as data in this Level 1 task.

- See example appropriate for this Level 1 task:



STAAR Reporting Category 5 – Probability and Statistics: The student will demonstrate an understanding of probability and statistics.	
TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations	Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations
<p>(3.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to</p> <ul style="list-style-type: none"> (A) collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data; Readiness Standard (B) interpret information from pictographs and bar graphs; Supporting Standard (C) use data to describe events as more likely than, less likely than, or equally likely as. Supporting Standard 	<p>Essence Statement D: Uses data to solve problems.</p>

Level 3

Prerequisite skill: use organized data to construct real-object graphs, picture graphs, and bar-type graphs

The student will be presented a set of simple data and an unlabeled graph. The student will determine the labels for the graph. The student will record the data on the graph. The student will answer a question about the graph.

Predetermined Criteria

1. The student will determine the labels for the graph.
2. The student will record the data on the graph.
3. The student will answer a question about the graph.

Level 2

Prerequisite skill: construct graphs using real objects or pictures in order to answer questions

The student will be presented objects or representations that can be sorted into only three of five possible categories, a three-column graph, and five labels for the possible categories. After using the labels to sort the objects or representations into three categories, the student will supply the labels for the three categories on the graph. The student will arrange the objects or representations on the graph according to the labeled categories. The student will answer a question about the data in the graph.

Predetermined Criteria

1. The student will supply the labels for the three categories on the graph.
2. The student will arrange the objects or representations on the graph according to the labeled categories.
3. The student will answer a question about the data in the graph.

Level 1

Prerequisite skill: collect data and organize it in a graphic representation

The student will be presented three identical objects. The student will explore the objects. The student will participate in placing each object on a graphic display one at a time. The student will experience the three objects placed together in the graphic display.

Predetermined Criteria

1. The student will explore the objects.
2. The student will participate in placing each object on a graphic display one at a time.
3. The student will experience the three objects placed together in the graphic display.