

Standardized Assessment Tasks for
STAAR Alternate

Grade 5 Mathematics

| STAAR Reporting Category 1 – Numbers, Operations, and Quantitative Reasoning: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning. | |
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| TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations | Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations |
| <p>(5.1) Number, operation, and quantitative reasoning. The student uses place value to represent whole numbers and decimals. The student is expected to</p> <p>(A) use place value to read, write, compare, and order whole numbers through 999,999,999,999; Supporting Standard</p> <p>(B) use place value to read, write, compare, and order decimals through the thousandths place. Supporting Standard</p> | <p>Essence Statement A: Uses place value to demonstrate understanding of numbers.</p> |

Level 3

Prerequisite skill: determine the value of a collection of coins and bills

The student will be presented a set of coins and bills and the following template \$___. The student will organize the bills and coins by value. The student will determine the total value of the set of coins and bills. The student will record the monetary amount on the template.

Predetermined Criteria

1. The student will organize the bills and coins by value.
2. The student will determine the total value of the set of coins and bills.
3. The student will record the monetary amount on the template.

Process skill: relate informal language to mathematical language and symbols

Transition

Level 2

Prerequisite skill: identify individual coins by name and value and describe relationships among them

The student will be presented a collection of no more than 9 dimes and 9 pennies. The student will sort the dimes and pennies into two groups. The student will count the number of dimes and the number of pennies. The student will identify the total recorded value of the coins.

Predetermined Criteria

1. The student will sort the dimes and pennies into two groups.
2. The student will count the number of dimes and the number of pennies.
3. The student will identify the total recorded value of the coins.

Process skill: identify mathematics in everyday situations

Transition

Level 1

Prerequisite skill: count 1-10 items, with one count per item

The student will be presented two identical items to purchase. Each item will cost ten cents. The student will explore the items. The student will be presented ten pennies. The student will participate in counting the pennies. The student will be presented a dime. The student will participate in pairing the pennies with the dime. The student will participate in purchasing one item with the ten pennies and the other item with the dime.

Predetermined Criteria

1. The student will participate in counting the pennies.
2. The student will participate in pairing the pennies with the dime.
3. The student will participate in purchasing one item with the ten pennies and the other item with the dime.

Transition

Definitions/Examples for STAAR Reporting Category 2 (5.6) Essence Statement B

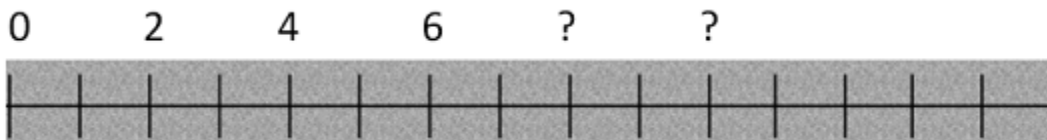
The following definitions clarify terms used in the grade 5 mathematics assessment tasks to ensure that the content of the tasks is understood. When appropriate, examples and nonexamples have been provided for further clarification. These are just examples and do not represent all the appropriate ways to test the skills in the STAAR Alternate assessment tasks.

Level 2 and Level 1: page 6

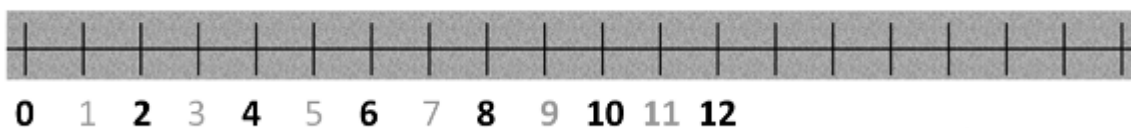
pattern – an arrangement that repeats according to a rule. There should be at least three repeating iterations/strands to establish a pattern.

- For the Level 2 task, the student will be presented a number line emphasizing a pattern of consecutive even numbers; the pattern increases by two at each stage. The number lines below could be presented to the student:

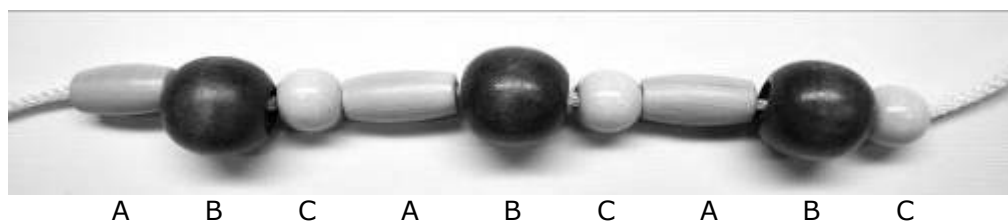
Example 1:



Example 2:



- For the Level 1 task, the ABC pattern example below is appropriate:



| STAAR Reporting Category 2 – Patterns, Relationships, and Algebraic Reasoning: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning. | |
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| TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations | Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations |
| <p>(5.6) Patterns, relationships, and algebraic thinking. The student describes relationships mathematically. The student is expected to</p> <p>(A) select from and use diagrams and equations such as $y = 5 + 3$ to represent meaningful problem situations; Supporting Standard</p> <p>(B) model situations using addition and/or subtraction involving fractions with like denominators using [concrete objects,] pictures, words, and numbers. Supporting Standard</p> | <p>Essence Statement B: Recognizes mathematical relationships using number sentences and diagrams.</p> |

Level 3

Prerequisite skill: find patterns in numbers, including odd and even

The student will be presented 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. The remaining locations will have missing numbers. The student will locate one designated even-numbered location. The student will locate one designated odd-numbered location. The student will record the missing numbers for the other locations on both sides.

Predetermined Criteria

1. The student will locate one designated even-numbered location.
2. The student will locate one designated odd-numbered location.
3. The student will record the missing numbers for the other locations on both sides.

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 2

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

The student will be presented a number line emphasizing a pattern of consecutive even numbers. The student will identify the pattern. The student will supply the next two numbers in the pattern. The student will count by 2s to a specified number using the number line.

Predetermined Criteria

1. The student will identify the pattern.
2. The student will supply the next two numbers in the pattern.
3. The student will count by 2s to a specified number using the number line.

Level 1

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

The student will be presented items that will be used to represent an ABC pattern. The student will explore the A, B and C items. The student will participate in creating the ABC pattern. The student will respond to the pattern after it is completed.

Predetermined Criteria

1. The student will explore the A, B and C items.
2. The student will participate in creating the ABC pattern.
3. The student will respond to the pattern after it is completed.

Definitions/Examples for STAAR Reporting Category 4 (5.11)
Essence Statement C

The following definitions clarify terms used in the grade 5 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

In this Level 2 task, the duration of each activity will be recorded on cards. The cards must contain the duration and the unit; a number listed on the card without a unit listed would NOT be appropriate. Examples could include:

10 minutes

or

10 seconds

NOT

10

| STAAR Reporting Category 4 – Measurement: The student will demonstrate an understanding of the concepts and uses of measurement. | |
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| TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations | Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations |
| <p>(5.11) Measurement. The student applies measurement concepts. The student measures time and temperature (in degrees Fahrenheit and Celsius). The student is expected to</p> <ul style="list-style-type: none"> (A) solve problems involving changes in temperature; Supporting Standard (B) solve problems involving elapsed time. Supporting Standard | <p>Essence Statement C: Uses temperature and time to solve problems.</p> |

Level 3

Prerequisite skill: read and write times shown on analog and digital clocks using five-minute increments

Given a time to an exact hour, half-hour, or quarter-hour on a digital clock, the student will determine how to set the hands on an analog clock to display the time on the digital clock. Using this time and the analog clock, the student will determine what the time will be in 15 minutes. The student will record the new time.

Predetermined Criteria

1. The student will determine how to set the hands on an analog clock to display the time on the digital clock.
2. The student will determine what the time will be in 15 minutes.
3. The student will record the new time.

Process skill: explain and record observations using objects, words, pictures, numbers, and technology

Transition

Level 2

Prerequisite skill: order three or more events according to duration

The student will be presented three different activities to perform. Using a stopwatch, the student will assist in measuring the time it takes to complete each activity. The time for each activity will be recorded on cards. The student will arrange the cards from shortest to longest duration. The student will identify which activity took the most time to complete.

Predetermined Criteria

1. The student will assist in measuring the time it takes to complete each activity.
2. The student will arrange the cards from shortest to longest duration.
3. The student will identify which activity took the most time to complete.

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

Level 1

Prerequisite skill: sequence events (up to three)

The student will be presented three objects representing three steps of a sequenced routine. Each step of the routine will be assigned a time limit for completion. The student will participate in setting the timer for each step in the routine. The student will participate in using the objects to perform the steps. The student will respond each time the timer goes off.

Predetermined Criteria

1. The student will participate in setting the timer for each step in the routine.
2. The student will participate in using the objects to perform the steps.
3. The student will respond each time the timer goes off.

| STAAR Reporting Category 5 – Probability and Statistics: The student will demonstrate an understanding of probability and statistics. | |
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| TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations | Essence of TEKS Knowledge & Skills Statement / STAAR-Tested Student Expectations |
| <p>(5.13) 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) use tables of related number pairs to make line graphs; Supporting Standard (B) describe characteristics of data presented in tables and graphs including median, mode, and range; Readiness Standard (C) graph a given set of data using an appropriate graphical representation such as a picture or line graph. Supporting Standard | <p>Essence Statement D: Displays and solves problems using data.</p> |

Level 3

Prerequisite skill: collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data

The class needs to determine the most profitable time during the school day to sell the same product. Given unorganized data from the sale of the product, the student will determine the number of products sold during three different times of the day. The student will generate a graph to display the data. The student will determine the most profitable time to sell a product during the school day.

Predetermined Criteria

1. The student will determine the number of products sold during three different times of the day.
2. The student will generate a graph to display the data.
3. The student will determine the most profitable time to sell a product during the school day.

Process skill: solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness

Level 2

Prerequisite skill: draw conclusions and answer questions based on picture graphs and bar-type graphs

The student will be presented a graph displaying the total number of a product sold during three different times of the school day. The student will identify the total number of the product sold for each time period. The student will identify the time of day in which the fewest number of the product was sold. The student will identify the time of day that was the most profitable for selling the product.

Predetermined Criteria

1. The student will identify the total number of the product sold for each time period.
2. The student will identify the time of day in which the fewest number of the product was sold.
3. The student will identify the time of day that was the most profitable for selling the product.

Process skill: justify his or her thinking using objects, words, pictures, numbers, and technology

Level 1

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

The student will be presented a real-life problem in which a particular item will be sold over a two-day period to find the most profitable day. The student will be presented a representation for money to be used as the title of a graph that the teacher and student will create. The student will participate in labeling the graph with representations for the two different days. The student will participate in placing an object on the graph representing each item that was sold each day. The student will acknowledge the category on the graph with more objects.

Predetermined Criteria

1. The student will participate in labeling the graph with representations for the two different days.
2. The student will participate in placing an object on the graph representing each item that was sold each day.
3. The student will acknowledge the category on the graph with more objects.