| Mathematic <br> acquire and demonstrate mathematical understanding. The student is expected to: |  |
| :--- | :--- | :--- |
| TEKS | Question Stems |

## Math STAAR- Grade $5 \mid 2015$

|  |  | (7) How much will Anthony need to save each week in order to meet his goal? (2015 - Sample Item) |
| :---: | :---: | :---: |
|  |  | (8) What fraction of the notebook paper Mrs. Ali collected was used during these three months? (2015 <br> - Sample Item) |
|  |  | (9) How many flights departing from the airport were delayed by weather? (2015 - Sample Item) |
|  |  | (10) What is the total amount Warren paid for these two items? (2015 - Sample Item) |
|  |  | (11) For how many days did Malia feed the birdseed to her birds? (2015 - Sample Item) |
|  |  | (12) Which equation can be used to find $b$, the total number of these baseballs that Pedro did not use during the game? (2015 - Sample Item) |
|  |  | (13) Which of these tables shows other points that satisfy the equation $y=x+3$ ? (2015 - Sample Item) |
|  |  | (14) What is the area of this base of the prism in square inches? Record your answer and fill in the bubbles on your answer document. (2015-Sample Item) |
|  |  | (15) Which shapes appear to be classified correctly? (2015 - Sample Item) |
|  |  | (16) Which ordered pair could represent the location of the fourth vertex of this trapezoid? (2015 - Sample Item) |
|  |  | (17) Which dot plot represents these measurements? <br> (2015 - Sample Item) |
|  |  | (18) Which scatterplot best represents the data? (2015 - Sample Item) |
|  |  | (19) Based on the data in the table, how many students preferred the three colors that had the highest frequencies? (2015 - Sample Item) |
|  |  | (22) What are two actions Mando can take in order to balance his budget? (2015 - Sample Item) |
|  |  | (23) How much is Ms. Vonn's monthly car payment? <br> (2015 - Sample Item) |
| 5(1)(C) | select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems | (14) What is the area of this base of the prism in square inches? Record your answer and fill in the bubbles on your answer document. (2015 - Sample Item) |
| 5(1)(D) | communicate mathematical ideas, reasoning, and their implications using multiple representations, | (4) Which equation can be represented by the shaded parts of the model? (2015 - Sample Item) |
|  |  | (6) Which equation is represented by this model? (2015 - Sample Item) |


|  | graphs, and language as appropriate | (12) Which equation can be used to find $b$, the total number of these baseballs that Pedro did not use during the game? (2015 - Sample Item) |
| :---: | :---: | :---: |
|  |  | (13) Which of these tables shows other points that satisfy the equation $y=x+3$ ? (2015 - Sample Item) |
|  |  | (17) Which dot plot represents these measurements? <br> (2015 - Sample Item) |
|  |  | (18) Which scatterplot best represents the data? <br> (2015 - Sample Item) |
| 5(1)(E) | create and use representations to organize, record, and communicate mathematical ideas | (1) Which number sentence correctly compares the masses of two of the rocks? (2015-Sample Item) |
|  |  | (8) What fraction of the notebook paper Mrs. Ali collected was used during these three months? (2015 <br> - Sample Item) |
|  |  | (9) How many flights departing from the airport were delayed by weather? (2015 - Sample Item) |
|  |  | (15) Which shapes appear to be classified correctly? (2015 - Sample Item) |
|  |  | (16) Which ordered pair could represent the location of the fourth vertex of this trapezoid? (2015 - Sample Item) |
|  |  | (19) Based on the data in the table, how many students preferred the three colors that had the highest frequencies? (2015 - Sample Item) |
|  |  | (23) How much is Ms. Vonn's monthly car payment? <br> (2015 - Sample Item) |
| 5(1)(F) | analyze mathematical relationships to connect and communicate mathematical ideas | (1) Which number sentence correctly compares the masses of two of the rocks? (2015-Sample Item) |
|  |  | (3) What is the value of this expression? (2015 Sample Item) |
|  |  | (4) Which equation can be represented by the shaded parts of the model? (2015 - Sample Item) |
|  |  | (5) What is the amount of money Denise spent on these snacks? (2015 - Sample Item) |
|  |  | (6) Which equation is represented by this model? (2015 - Sample Item) |
|  |  | (7) How much will Anthony need to save each week in order to meet his goal? (2015 - Sample Item) |
|  |  | (8) What fraction of the notebook paper Mrs. Ali collected was used during these three months? (2015 <br> - Sample Item) |
|  |  | (9) How many flights departing from the airport were delayed by weather? (2015 - Sample Item) |
|  |  | (10) What is the total amount Warren paid for these two items? (2015 - Sample Item) |
|  |  | (11) For how many days did Malia feed the birdseed to her birds? (2015 - Sample Item) |
|  |  | (12) Which equation can be used to find $b$, the total number of these baseballs that Pedro did not use during the game? (2015 - Sample Item) |

## Math STAAR- Grade $5 \mid 2015$



$\left.$| 5(2)(B) | compare and order two decimals <br> to thousandths and represent <br> comparisons using the symbols >, <br> <, or = | (1) Which number sentence correctly compares the <br> masses of two of the rocks? (2015-Sample Item) |
| :--- | :--- | :--- |
| 5(2)(C) | round decimals to tenths or <br> hundredths |  |
| Number and operations. The student applies mathematical process standards to <br> develop and use strategies and methods for positive rational number computations in <br> order to solve problems with efficiency and accuracy. The student is expected to: |  |  |
| SE | TEKS |  |$\quad$| Question Stems |
| :--- | :--- | \right\rvert\, | estimate to determine solutions to |
| :--- |
| mathematical and real-world |
| problems involving addition, |
| subtraction, multiplication, or |
| division |$\quad$| multiply with fluency a three-digit |
| :--- |
| number by a two-digit number |
| using the standard algorithm |$\quad$| 5olve with proficiency for quotients |
| :--- |
| of up to a four-digit dividend by a |
| two-digit divisor using strategies |
| and the standard algorithm |$\quad$| 5(3)(B) |
| :--- |


| 5(3)(H) | represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations | (8) What fraction of the notebook paper Mrs. Ali collected was used during these three months? (2015 <br> - Sample Item) |
| :---: | :---: | :---: |
| 5(3)(I) | represent and solve multiplication of a whole number and a fraction that refers to the same whole using objects and pictorial models, including area models | (9) How many flights departing from the airport were delayed by weather? (2015 - Sample Item) |
| 5(3)(J) | represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction such as $1 / 3 \div 7$ and 7 $\div 1 / 3$ using objects and pictorial models, including area models |  |
| 5(3)(K) | add and subtract positive rational numbers fluently | (10) What is the total amount Warren paid for these two items? (2015 - Sample Item) |
| 5(3)(L) | divide whole numbers by unit fractions and unit fractions by whole numbers | (11) For how many days did Malia feed the birdseed to her birds? (2015 - Sample Item) |
| Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to: |  |  |
| SE | TEKS | Question Stems |
| 5(4)(A) | identify prime and composite numbers |  |
| 5(4)(B) | represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity | (12) Which equation can be used to find $b$, the total number of these baseballs that Pedro did not use during the game? (2015 - Sample Item) |
| 5(4)(C) | generate a numerical pattern when given a rule in the form $y=a x$ or $y=x+a$ and graph | (13) Which of these tables shows other points that satisfy the equation $y=x+3$ ? (2015-Sample Item) |
| 5(4)(D) | recognize the difference between additive and multiplicative numerical patterns given in a table or graph |  |
| 5(4)(E) | describe the meaning of parentheses and brackets in a numeric expression | (2) Which statement is true about the parentheses in this expression? (2015-Sample Item) |
| 5(4)(F) | simplify numerical expressions that do not involve exponents, including up to two levels of grouping | (3) What is the value of this expression? (2015 Sample Item) |


| 5(4)(G) | use concrete objects and pictorial models to develop the formulas for the volume of a rectangular prism, including the special form for a cube $(V=I \times w \times h, V=s \times s \times s$, and $V=B h$ ); |  |
| :---: | :---: | :---: |
| 5(4)(H) | represent and solve problems related to perimeter and/or area and related to volume | (14) What is the area of this base of the prism in square inches? Record your answer and fill in the bubbles on your answer document. (2015 - Sample Item) |
| Geometry and measurement. The student applies mathematical process standards to classify two-dimensional figures by attributes and properties. The student is expected to classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties |  |  |
| SE | TEKS | Question Stems |
| 5(5)(A) | classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties | (15) Which shapes appear to be classified correctly? (2015 - Sample Item) |
| Geometry and measurement. The student applies mathematical process standards to understand, recognize, and quantify volume. The student is expected to: |  |  |
| SE | TEKS | Question Stems |
| 5(6)(A) | recognize a cube with side length of one unit as a unit cube having one cubic unit of volume and the volume of a three-dimensional figure as the number of unit cubes ( $n$ cubic units) needed to fill it with no gaps or overlaps if possible |  |
| 5(6)(B) | determine the volume of a rectangular prism with whole number side lengths in problems related to the number of layers times the number of unit cubes in the area of the base |  |
| Geometry and measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving measurement. The student is expected to solve problems by calculating conversions within a measurement system, customary or metric |  |  |
| SE | TEKS | Question Stems |


| 5(7)(A) | solve problems <br> by calculating conversions within a <br> measurement system, customary <br> or metric |
| :--- | :--- |

Geometry and measurement. The student applies mathematical process standards to identify locations on a coordinate plane. The student is expected to:

| SE | TEKS |  |
| :--- | :--- | :--- |
| 5(8)(A) | describe the key attributes of the <br> coordinate plane, including <br> perpendicular number lines (axes) <br> where the intersection (origin) of <br> the two lines coincides with zero <br> on each number line and the given <br> point (0, 0); the $x$-coordinate, the <br> first number in an ordered pair, <br> indicates movement parallel to <br> the $x$-axis starting at the origin; <br> and the $y$-coordinate, the second <br> number, indicates movement <br> parallel to the $y$-axis starting at <br> the origin |  |
| 5(8)(B) | describe the process for graphing <br> ordered pairs of numbers in the <br> first quadrant of the coordinate <br> plane |  |
| 5(8)(C) | graph in the first quadrant of the <br> coordinate plane ordered pairs of <br> numbers arising from <br> mathematical and real-world <br> problems, including those <br> generated by number patterns or <br> found in an input-output table | (16) Which ordered pair could represent the location <br> of the fourth vertex of this trapezoid? (2015 - Sample <br> Item) |

Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:

| SE | TEKS | Question Stems |
| :--- | :--- | :--- |
| $5(9)(A)$ | represent categorical data with bar <br> graphs or frequency tables and <br> numerical data, including data sets <br> of measurements in fractions or <br> decimals, with dot plots or stem- <br> and-leaf plots | (17) Which dot plot represents these measurements? <br> (2015 - Sample Item) |
| $5(9)(B)$ | represent discrete paired data on a <br> scatterplot | (18) Which scatterplot best represents the data? <br> (2015 - Sample Item) |
| $5(9)(C)$ | solve one- and two-step problems <br> using data from a frequency table, | (19) Based on the data in the table, how many <br> students preferred the three colors that had the <br> highest frequencies? (2015 - Sample Item) |


|  | dot plot, bar graph, stem-and-leaf <br> plot, or scatterplot |  |
| :--- | :--- | :--- |

## Math STAAR- Grade 5

Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:

| SE | TEKS | Question Stems |
| :--- | :--- | :--- |
| $5(10)(\mathrm{A})$ | define income tax, payroll tax, <br> sales tax, and property tax | (20) Which term best describes this tax? (2015 - <br> Sample Item) |
| $5(10)(\mathrm{B})$ | explain the difference between <br> gross income and net income | (21) Which of these statements about gross income <br> and net income is true? (2015 - Sample Item) |
| $5(10)(\mathrm{C})$ | identify the advantages and <br> disadvantages of different methods <br> of payment, including check, credit <br> card, debit card, and electronic <br> payments |  |
| $5(10)(\mathrm{D})$ | develop a system for keeping and <br> using financial records |  |
| $5(10)(\mathrm{E})$ | describe actions that might be <br> taken to balance a budget when <br> expenses exceed income | (22) What are two actions Mando can take in order to <br> balance his budget? (2015 - Sample Item) |
| $5(10)($ F) | balance a simple budget | (23) How much is Ms. Vonn's monthly car payment? <br> (2015 - Sample Item) |

