Step Up to the TEKS by GF Educators, Inc.

Fifth Grade Mathematics

2016 Released Items Analysis



5th Grade	Mathematics Released Items
Name:	
Teacher:	
Date:	
	Pup to the TEKS by GF. Educators, Inc. cional Analysis

IA Item Analysis

2016 Released Items

Category 1

5th Grade Math

TEKS 5.2A Supporting Standard represent the value of the digit in decimals through the thousandths using ex	panded nota	ation and numerals	
ITEM 5 A bank received a check for two thousand, six hundred nine		Item Analysis	
dollars and seventy-five cents. How is this number written in expanded notation?	Verb	Represent	
A $(2 \times 1,000) + (6 \times 100) + (9 \times 10) + (7 \times 0.01) + (5 \times 0.01)$	Using or Including	Expanded Notation	
B $(2 \times 1,000) + (6 \times 100) + (9 \times 1) + (7 \times 0.1) + (5 \times 0.01)$ C $(2 \times 1,000) + (6 \times 10) + (9 \times 1) + (7 \times 1) + (5 \times 1)$	Concept	Value of Digits in a Decimal	
D $(2 \times 1,000) + (6 \times 100) + (9 \times 1) + (7 \times 0.01) + (5 \times 0.001)$	Process TEKS	5.1A, 5.1B, 5.1D, 5.1F	
		Notes	

TEKS 5.2B Readiness Standard compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or =

ITEM

8 The table shows the time in seconds it took four swimmers to complete a race.

Race Times

Swimmer	One	Two	Three	Four
Time (seconds)	26.15	26.5	26.1	26.05

Which inequality correctly compares two of these race times?

- 26.5 > 26.05 F.
- **G** 26.15 > 26.5
- **H** 26.1 < 26.05
- 26.15 < 26.1 J

Item Analysis		
Verb	Compare	
Using or Including	Symbols (<, >)	
Concept	Decimals	
Process TEKS	5.1A, 5.1B, 5.1E, 5.1F	
	Notes	

Item Analysis	Category 1	5 th Grade	Math
EKS ! mpare	5.2B Readiness Standard and order two decimals to thousandths and represent comparison	s using the sym	ubols >, <, or =
ЕМ 3 Јоз	shua compared the values of these decimals.	I	tem Analysis
	0.06 0.6 0.006 0.060	Verb	Compare
Whic	ch statement correctly compares two of these numbers?	Using or Including	Symbols (<, >, =)
A B	0.6 < 0.06 0.006 > 0.6	Concept	Decimals
C D	0.6 = 0.06 0.060 = 0.06	Process TEKS	5.1A, 5.1B, 5.1F
			Notes
E KS ! mpare	5.2B Readiness Standard and order two decimals to thousandths and represent comparison	is using the sym	bols >, <, or =

ITEM

34 Books in a library are arranged by their Dewey decimal number The Dewey decimal numbers for five books are shown in the picture.



Lana will put these five books in order from the least number to the greatest number. Which book will be in the fourth position?

- **F** 419.018
- **G** 417.97
- **H** 418.537
- **J** 418.63

۹r.	Item Analysis				
	Verb	Compare Order			
	Using or Including	NA			
Concept Decir		Decimals			
)	Process TEKS	5.1A, 5.1B, 5.1F			
		Notes			

2016 Released Items IA Item Analysis Category 1

5th Grade Math

TEKS 5.2C Supporting Standard		
	-	
ITEM		Item Analysis
hundredth. What is this number rounded to the nearest hundredth?	Verb	Round
A 100 B 129 30	Using or Including	NA
C 130 D 129.26	Concept	Decimals to Hundredths
	Process TEKS	5.1A, 5.1B, 5.1F
TEKS 5.4A Supporting Standard		
		Itom Analysis
20 Seth's homework assignment is to write factor pairs that contain only composite numbers. Seth wrote four factor pairs for the number 132, as shown below.	Verb	Item Analysis Identify
20 Seth's homework assignment is to write factor pairs that contain only composite numbers. Seth wrote four factor pairs for the number 132, as shown below. 6×22 11×12	Verb Using or Including	Item Analysis Identify NA
 Seth's homework assignment is to write factor pairs that contain only composite numbers. Seth wrote four factor pairs for the number 132, as shown below. 6 ×22 11 × 12	Verb Using or Including Concept	Item Analysis Identify NA Composite Numbers
 20 Seth's homework assignment is to write factor pairs that contain only composite numbers. Seth wrote four factor pairs for the number 132, as shown below. 6 ×22 11 × 12 3 ×44 2×66 Which of Seth's factor pairs contains only composite numbers? 	Verb Using or Including Concept Process TEKS	Item Analysis Identify NA Composite Numbers 5.1A, 5.1B, 5.1F

<u>(I</u>	2016 Released Items		
Iter Analy	", Category 1	5 th Grad	e Math
TEK simpl	5 5.4F Readiness Standard ify numerical expressions that do not involve exponents, including up to	o two levels c	f grouping
	1 At a clothing store. Zoev bought 2 shirts for \$7.25 each and 2	:	Item Analysis
20	pairs of jeans for \$24 each. She used a coupon for \$10 off the total price of the clothes. The discounted price of the clothes.	Verb	Simplify
	[2(7.25) + 2(24)] - 10	Using or Including	Two Levels of Grouping
W	hat is the discounted price in dollars and cents of the clothes	Concept	Numerical Expression
	Dey Dougnt?	Process TEKS	5.1A, 5.1B, 5.1F
d	ocument. Be sure to use the correct place value.		Notes
	5 - 5 - 45 Deadiness Standard		
simpl	ify numerical expressions that do not involve exponents, including up to	o two levels c	f grouping
ITEN 49	1 What is the value of this expression?		Item Analysis
	[45 - (6 + 3)] × 27	Verb	Simplify
	1,134	Using or Including	Two Levels of Grouping
	1972 198 1.206	Concept	Numerical Expression
		Process TEKS	5.1B, 5.1F
			Notes

<u>IA</u>	2016 Released Items		
Item Analysis	Category 2	5 th Grac	le Math
TEKS ! estimate multiplic	5.3A Supporting Standard to determine solutions to mathematical and real-world problems inv ation, or division	volving additi	on, subtraction,
ITEM 2 Mr	Márquez had 123 eggs in a refrigerator in his restaurant		Item Analysis
He	put 32 more cartons of eggs in the refrigerator. Each carton ntained 18 eggs. Which of these is the best estimate of the	Verb	Estimate
nu F	600	Using or Including	Addition Multiplication
G H	400 700	Concept	Real-World
J	900	Process TEKS	5.1A, 5.1B, 5.1C, 5.1F
TEKS			
multiply	with fluency a three-digit number by a two-digit number using the s	tandard algo	rithm
27 A G	company makes 625 cell phone cases each day. How many		Item Analysis
cel	I phone cases does the company make in 31 days?	Verb	Multiply
A B C	18,375 1,490 2,500	Using or Including	Standard Algorithm
D	19,375	Concept	Three-Digit by a Two- Digit
		Process TEKS	5.1A, 5.1B, 5.1F
			Notes

IA	2016 Released Items		
Item Analysis	Category 2	5 th Grad	e Math
TEKS solve w standar	5.3C Supporting Standard th proficiency for quotients of up to a four-digit dividend by a two-dig d algorithm	it divisor usi	ng strategies and the
ITEM 33 Ta	ra has a box of 908 beads for making bracelets. She wants to]	Item Analysis
pi ni	it 15 beads on each bracelet she makes. What is the greatest imber of bracelets Tara can make with these beads?	Verb	Solve
A	61 70	Using or Including	Strategies Standard Algorithm
C D	60 68	Concept	Quotient of Three-Digit by Two-Digit
		Process TEKS	5.1A, 5.1B, 5.1F
			Notes

TEKS 5.3D Supporting Standard represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models

ITEM



7

IA	2016 Released Items
Item Analysis	Category 2

5th Grade Math

TEM Scott drank 3.5 bottles of water vesterday. Each bottle		Item Analysis		
	contained 1.2 pints of water. What was the number of pints of water Scott drank yesterday?	Verb	Solve	
A B	4.7 pints 4.2 pints	Using or Including	Place-Value Understanding	
C D	4.1 pints 42 pints	Concept	Products of Decimals	
		Process TEKS	5.1A, 5.1B, 5.1F	
			Notes	

ITE	м	Item Analysis		
39	9 Freddy exercised 2.5 hours per day on 4 days last week. He burned 330 calories per hour while exercising. How many calories did Freddy burn by exercising last week?		Solve	
	 A 2,640 calories B 26,400 calories 	Using or Including	Strategies	
	 C 3,300 calories D 33,000 calories 	Concept	Product of Decimals	
		Process TEKS	5.1A, 5.1B, 5.1F	
			Notes	



TEKS 5.3G Readiness Standard solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm

ITEM 4 A rope was 14.35 inches long. Megan cut the rope into 7 pieces				Item Analysis		
	of equal length. What was the length of each piece of rope in inches?		Verb	Solve		
	F G	2.5 in. 2.35 in.	Using or Including	Strategies Standard Algorithm		
	H J	2.05 in. 2.55 in.	Concept	Quotients of Decimals		
			Process TEKS	5.1A, 5.1B, 5.1F		
				Notes		

IA	2016 Released Items
Item Analysis	Category 2

5th Grade Math

TEKS 5.3G Readiness Standard solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm ITEM **Item Analysis 44** What is the quotient when 0.75 is divided by 5? Verb Solve F 4.25 G 0.15 Using or Strategies 3.75 н Including Standard Algorithm J Not here Concept Quotients of Decimals Process 5.1B, 5.1F TEKS Notes

TEKS 5.3H Supporting Standard 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

ITEM 6 Cara and Marcus shared a candy bar. The models are shaded to		Item Analysis
show the fraction of the candy bar each of them ate.	Verb	Solve
Cara	Using or Including	Pictorial Models
Marcus	Concept	Addition Fractions
What fraction of the candy bar did Cara and Marcus eat altogether?	Process TEKS	5.1A, 5.1B, 5.1E, 5.1F
F $\frac{11}{12}$ G $\frac{9}{16}$ H $\frac{1}{12}$ J $\frac{9}{24}$		Notes



5th Grade Math



TEKS 5.3J Supporting Standard 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

ITEM



Item Analysis		
Verb	Represent	
Using or Including	Pictorial Models	
Concept	Multiplication of a Whole Number and a Fraction	
Process TEKS 5.1B, 5.1D, 5.1F		
	Notes	

IA Item Analysis Cat

2016 Released Items

Category 2

5th Grade Math

EKS 5.3K Readiness Standard add and subtract positive rational numbers fluently ITEM **Item Analysis 18** Last month Jim drove his car 2,718.3 miles. That brought the car's total mileage to 87,416 miles. What was the car's total Verb Add mileage before last month? Using or F 84,697.7 mi NA Including G 85,302.7 mi Positive Rational 89,124.3 mi н Concept Numbers J 90,134.3 mi Process 5.1A, 5.1B, 5.1F TEKS Notes **TEKS 5.3K Readiness Standard** add and subtract positive rational numbers fluently ITEM **Item Analysis** 24 The table shows the population of three Texas counties. The population of Gray County is missing. Verb Add Population County Population Using or NA Anderson 58,308 Including 2,416,014 Dallas Positive Rational Brazos 197,632 Concept Numbers Gray The population of Gray County is 35,553 less than the population Process 5.1A, 5.1B, 5.1E, 5.1F of Anderson County. What is the combined population of these TEKS four counties? Notes F. 2,694,709 G 2,707,507 **H** 2,695,209 J 2,765,815

	A)	
If Ana	tem alysis	T	

2016 Released Items

Category 2

5th Grade Math

TEKS 5.3K Readiness Standard add and subtract positive rational numbers fluently		
ITEM 25 Marcha bought a birthday card for \$2.86 and a pop for \$1.57]	Item Analysis
She paid with a \$20 bill. How much change should Marsha have received?	Verb	Add Subtract
A \$15.57 B \$24.43	Using or Including	NA
C \$17.77 D \$16.57	Concept	Positive Rational Numbers
	Process TEKS	5.1A, 5.1B, 5.1F
divide whole numbers by unit fractions and unit fractions by whole numbers		
ITEM 13 Cyril put a total of $\frac{1}{2}$ lb of gravel into 6 fish tanks. He put the]	Item Analysis
same amount of gravel into each tank. How many pounds of gravel did Cyril put into each fish tank?	Verb	Divide
$A \frac{6}{8} \text{ lb}$	Using or Including	NA
$ \mathbf{B} \stackrel{1}{=} \text{ Ib} \\ \mathbf{C} \stackrel{1}{=} \stackrel{1}{=} \text{ Ib} \\ \vec{C} \stackrel{1}{=} \stackrel{1}{=} \text{ Ib} \\ \vec{C} \stackrel{1}{=} \stackrel{1}{=} 1 \text{ Ib} \\ \vec{C} \stackrel{1}{=} \stackrel{1}{=} 1 \text{ Ib} \\ \vec{C} \stackrel{1}{=} \stackrel{1}{=} 1 \text{ Ib} \\ \vec{C} \stackrel{1}{=} 1 \text{ Ib} \\ \vec{C} \stackrel{1}{=} 1 \text{ Ib} \\ \vec{C} \stackrel{1}{=} 1 \text{ Ib} \\ \vec{C} \stackrel{1}{=} 1 \text{ Ib} \\ $	Concept	Fraction by a Whole Number
$\mathbf{D} = \frac{\mathbf{v}}{48}$ lb	Process TEKS	5.1A, 5.1B, 5.1F
		Notes



2016 Released Items

Category 2

5th Grade Math

TEKS 5.3L Readiness Standard divide whole numbers by unit fractions and unit fractions by whole numbers		
ITEM 27 Amy out 22 fact of chain into pieces that were each $\frac{1}{2}$ ft long		Item Analysis
How many of these pieces did Amy have after cutting the chain?	Verb	Divide
Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.	Using or Including	NA
	Concept	Whole Number by a Fraction
	Process TEKS	5.1A, 5.1B, 5.1F
TEKS 5.4B Readiness Standard represent and solve multi-step problems involving the four operations with w letter standing for the unknown quantity	vhole number	rs using equations with a
ITEM14Mr. Anderson had 185 pieces of wood. He sold 25 pieces of		Item Analysis
wood to his neighbor and stacked the rest of the wood into piles around his house. Each pile of wood contained 40 pieces	Verb	Represent
piles of wood Mr. Anderson made?	Using or Including	Equation
F $p = (185 + 25) + 40$ G $p = (185 - 25) - 40$	Concept	Multi-Step Letter Unknown
H $p = (185 + 25) \times 40$ J $p = (185 - 25) \div 40$	Process TEKS	5.1A, 5.1B, 5.1D, 5.1F
		Notes

2016 Released Items IA Item Analysis

Category 2

5th Grade Math

ITEM		,			Item Analysis
30 The table shows the number of hats made at a factory during three weeks in February. The number of hats made in Week 4 is represented by <i>n</i> .			Verb	Represent	
	Ha Week	Number		Using or Including	Equations
	1 2	562,937 607,822		Concept	Multi-Step Letter Unknown
	3 4	492,375 n		Process TEKS	5.1A, 5.1B, 5.1E, 5.1F
4nThe total number of hats made at the factory in February was 2,148,431. Which equation represents this situation?F2,148,431 = $(562,937 + 607,822 + 492,375) + n$ GG2,148,431 = $(562,937 + 607,822 + 492,375) - n$ HH2,148,431 = $(562,937 + 607,822 + 492,375) \times n$ JJ2,148,431 = $(562,937 + 607,822 + 492,375) \times n$				Notes	

represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity

ITEM 41 This equation can be used to find by the number of dollars Mrs		Item Analysis		
	Colton earned as a sales bonus last week.		Verb	Solve
	Wha	$b = 429 (39 \times 9)$ at was the amount of Mrs. Colton's bonus?	Using or Including	Equations
	A	\$20	Concept	Multi-Step Problems
	B \$78 C \$158		Process TEKS	5.1A, 5.1B, 5.1F
		\$130		Notes





TEKS 5.4D Supporting Standard recognize the difference between additive and multiplicative numerical patterns given in a table or graph

ITEM

46 The points on the graph represent a numerical pattern.



Which statement about the pattern represented on the graph is true?

- **F** It is a multiplicative pattern because each *y*-coordinate has a higher value than the corresponding *x*-coordinate.
- **G** It is a multiplicative pattern because each *x*-coordinate is multiplied by 5 to create the corresponding *y*-coordinate.
- **H** It is an additive pattern because each *y*-coordinate has a higher value than the corresponding *x*-coordinate.
- J It is an additive pattern because each *x*-coordinate is increased by 4 to create the corresponding *y*-coordinate.

	Item Analysis			
Verb	Recognize			
Using or Including	Graph			
Concept	Numerical Patterns Additive & Multiplicative			
Process TEKS	5.1B, 5.1E, 5.1G			
	Notes			



ITEM

31 Duane packed some books in a box shaped like a rectangular prism. The volume of the box is 168 cubic inches. Which model could represent Duane's box?



	Item Analysis		
el	Verb	Represent	
	Using or Including	NA	
	Concept	Volume	
	Process TEKS	5.1A, 5.1B, 5.1C, 5.1E, 5.1F	
		Notes	

IA 2016 Released Items Item Analysis 5th Grade Math **Category 3 TEKS 5.4H Readiness Standard** represent and solve problems related to perimeter and/or area and related to volume ITEM **Item Analysis 43** A square has a perimeter of 20 centimeters and an area of 25 square centimeters. Use the ruler provided to measure the line Verb Solve segments below to the nearest centimeter. Which line segment could represent a side of this square? Using or NA Including -Α Perimeter В Concept Area С Process 5.1B, 5.1C, 5.1E, 5.1F D TEKS Notes

TEKS 5.5A Readiness Standard classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties

ITEM

28 Rachel classified shapes based on the types of angles they had The table shows her classifications.



Which shape was **not** classified correctly?

- Shape 4 F
- G Shape 5
- Shape 7 н
- J Shape 8

	Item Analysis		
Verb	Classify		
Using or Including	Graphic Organizer		
Concept	Two-Dimensional Figures		
Process TEKS	5.1A, 5.1B, 5.1E, 5.1F		
	Notes		



2016 Released Items

Category 3

5th Grade Math

TEKS 5.5A Readiness Standard classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties

ITEM

47 In which table are the check marks placed in all the correct boxes? Quadrilateral Rhombus



Item Analysis				
Verb Classify				
Using or Including	Graphic Organizer			
Concept	Two-Dimensional Figures			
Process TEKS	TEKS 5.1B, 5.1E, 5.1F			
	Notes			

Item Analysis

Notes

Recognize

Unit Cube

Volume

5.1A, 5.1B, 5.1C, 5.1E,

5.1F

Verb

Using or

Including

Concept

Process TEKS

TEKS 5.6A Supporting Standard 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

ITEM

Rebekah is filling a cube-shaped box with small cubes. The 3 volume of each of these cubes is 1 cubic centimeter. She has already put some of these cubes into the box, as shown in the model.



🗇 = 1 cubic centimeter

What is the total number of small cubes that will fit in the box?

- 729 Α
- В 81
- С 36
- D 27

IA 2016 Released Items		
Item Analysis Category 3	5 th Grad	e Math
TEKS 5.6B Supporting Standard determine the volume of a rectangular prism with whole number side lengths layers times the number of unit cubes in the area of the base	s in problems	related to the number of
ITEM 12 Raymond used 42 cubes to build the first layer of a rectangular		Item Analysis
 Raymond used 42 cubes to build the first layer of a rectangular prism. The edge length of each cube was 1 inch. The finished prism had a total of 7 layers. What is the volume of Raymond's prism in cubic inches? Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value. 	Verb	Determine
	Using or Including	Rectangular Prism Whole Number Sides
	Concept	Volume
	Process TEKS	5.1A, 5.1B, 5.1C, 5.1F
		Notes

TEKS 5.7A Supporting Standard solve problems by calculating conversions within a measurement system, customary or metric

ITEM

- 7 The lengths of two insects are given below.

 - Ladybug: 10 millimetersWalking stick: 30 centimeters

What is the difference in length of these two insects in millimeters?

- 70 mm Α
- В 20 mm
- 290 mm С
- D 2,990 mm

	Item Analysis
Verb	Solve
Using or Including	Metric Measurement System
Concept	Calculating Conversions
Process TEKS	5.1A, 5.1B, 5.1C, 5.1F
	Notes



5th Grade Math

TEKS 5.8A Supporting Standard describe the key attributes of the coordinate plane, including perpendicular number lines (axes) where the intersection (origin) of the two lines coincides with zero on each number line and the given point (0, 0); the x-coordinate, the first number in an ordered pair, indicates movement parallel to the x-axis starting at the origin; and the y-coordinate, the second number, indicates movement parallel to the y-axis starting at the origin ITEM **Item Analysis 40** A student graphs a point that is represented by the ordered pair (3, 0). In this ordered pair, what does the number 3 Verb Describe indicate? Using or F The point is 3 units above 0 on the *x*-axis. Coordinate Plane Including G The point is 3 units above 0 on the y-axis. Graphing an Ordered The point is 3 units to the right of 0 on the y-axis. Н Concept Pair J The point is 3 units to the right of 0 on the *x*-axis. Process 5.1A, 5.1B, 5.1G TEKS Notes

TEKS 5.8C Readiness Standard

graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table

ITEM



Paula is located at (7, 7). Based on this information, which statement is true?

Paula is located 1 unit south and 2 units east from Nathan. Α

0 1 2 3 4 5 6 7 8 9 10

- Paula is located 7 units east from Wade. В
- С Paula is located 3 units south and 2 units west from Denise.
- Paula is located 6 units west from Urvasi. D

	Item Analysis
Verb	Graph
Using or Including	Real-World
Concept	Ordered Pair
Process TEKS	5.1A, 5.1B, 5.1E, 5.1G
	Notes



TEKS 5.8C Readiness Standard graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table

ITEM 36 The ordered pairs below represent three vertices of a rhombus.		Item Analysis
(4, 9), (6, 7), (4, 5)	Verb	Graph
	Using or Including	Real-World
	Concept	Ordered Pair
	Process TEKS	5.1B, 5.1E, 5.1F
 0 1 2 3 4 5 6 7 8 9 10 Which ordered pair could represent the fourth vertex of this rhombus? F (7, 2) G (9, 7) H (2, 9) J (2, 7) 		Notes

IA Item Analysis

2016 Released Items

Category 4

5th Grade Math





TEKS 5.9C Readiness Standard solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot

ITEM 38 The bar graph shows the numbers of bags of two brands of dog		Item Analysis		
food that were sold at a store. One bar for Day 5 is missing from the graph.	Verb	Solve		
	Using or Including	Bar Graph		
$ \begin{array}{c} $	Concept	One-Step Problem		
The number of bags of Brand Y dog food sold on these five days was 175. Which bar represents the data for Day 5 for Brand Y?	Process TEKS	5.1A, 5.1B, 5.1E, 5.1F		
$\mathbf{F} \begin{bmatrix} 50 \\ 40 \\ 30 \\ 20 \\ 10 \\ Day 5 \end{bmatrix} \qquad \mathbf{H} \begin{bmatrix} 50 \\ 40 \\ 30 \\ 10 \\ Day 5 \end{bmatrix} \qquad \mathbf{J} \begin{bmatrix} 50 \\ 40 \\ 10 \\ Day 5 \end{bmatrix} \qquad \mathbf{J} \begin{bmatrix} 50 \\ 40 \\ 10 \\ Day 5 \end{bmatrix} \qquad \mathbf{J} \begin{bmatrix} 50 \\ 40 \\ 10 \\ Day 5 \end{bmatrix}$		Notes		

(IA	
	Item Analysis	

2016 Released Items

Category 4

5th Grade Math

TEKS 5.10A Supporting Standard define income tax, payroll tax, sales tax, and property tax		
ITEM 45 A definition of a financial term is shown in the box.		Item Analysis
	Verb	Define
A tax on retail products based on a set percentage of retail cost	Using or Including	NA
Which term best fits this definition?	Concept	Sales Tax
A Income taxB Payroll tax		5.1G
 C Property tax D Sales tax 		Notes
TEKS 5.10F Supporting Standard balance a simple budget		
		Itom Analysis
22 So far this month Nancy has the expenses and income shown	· · · ·	Item Analysis
 22 So far this month Nancy has the expenses and income shown in the chart. Nancy's Current Budget 	Verb	Item Analysis Balance
22 So far this month Nancy has the expenses and income shown in the chart. Nancy's Current Budget Expenses Income Clothes\$40 Lawn mowing\$30	Verb Using or Including	Item Analysis Balance NA
22 So far this month Nancy has the expenses and income shown in the chart. Nancy's Current Budget <u>Expenses</u> Clothes So far this month Nancy has the expenses and income shown in the chart. Nancy's Current Budget <u>Expenses</u> <u>Income</u> Clothes \$40 Food \$40 Movie tickets \$30 Carwashing \$25 Correct colspan="2">Correct colspan="2">Correct colspan="2">Correct colspan="2">Correct colspan="2">Correct colspan="2">So far this month Nancy has the expenses and income shown in the chart.	Verb Using or Including Concept	Item Analysis Balance NA Simple Budget
22 So far this month Nancy has the expenses and income shown in the chart. Nancy's Current Budget <u>Expenses</u> Clothes Clothes \$40 Food \$60 Movie tickets \$30 Car washing \$25 Garage sale \$35	Verb Using or Including Concept Process TEKS	Item Analysis Balance NA Simple Budget 5.1A, 5.1B, 5.1E, 5.1F
22 So far this month Nancy has the expenses and income shown in the chart. Nancy's Current Budget Expenses Income Clothes \$40 Food \$60 Movie tickets \$30 Car washing \$25 Garage sale \$35 Nancy wants to buy some music online but also have a balanced budget. Based on Nancy's current budget, what is the greatest amount of money she can spend on music?	Verb Using or Including Concept Process TEKS	Item Analysis Balance NA Simple Budget 5.1A, 5.1B, 5.1E, 5.1F Notes

Category 1 Numerical Representations and Relationships 8 Total Questions

TEKS	Item	Correct Answer	Process TEKS
5.2A represent the value of the digit in decimals through the thousandths using expanded notation and numerals	5	В	5.1A, 5.1B, 5.1D, 5.1F
5.2B compare and order two decimals	8	F	5.1A, 5.1B, 5.1E, 5.1F
comparisons using the symbols >, <,	23	D	5.1A, 5.1B, 5.1F
OF =	34	J	5.1A, 5.1B, 5.1F
5.2C round decimals to tenths or hundredths	1	D	5.1A, 5.1B, 5.1F
5.4A identify prime and composite numbers	20	F	5.1A, 5.1B, 5.1F
5.4E describe the meaning of parentheses and brackets in a numeric expression	NT		
5.4F simplify numerical expressions that do	25	52.5	5.1A, 5.1B, 5.1F
two levels of grouping	49	В	5.1B, 5.1F

Shaded - Readiness TEKS, NT - Not Tested

Readiness TEKS - 5/8 questions

Category 2 Computations and Algebraic Relationships 24 Total Questions

IEK	.5	Item	Answer	Process TEKS
5.3A	estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division	2	Н	5.1A, 5.1B, 5.1C, 5.1F
5.3B	multiply with fluency a three-digit number by a two- digit number using the standard algorithm	27	D	5.1A, 5.1B, 5.1F
5.3C	solve with proficiency for quotients of up to a four- digit dividend by a two-digit divisor using strategies and the standard algorithm	33	С	5.1A, 5.1B, 5.1F
5.3D	represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models	42	н	5.1A, 5.1B, 5.1D, 5.1F
5.3E	solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of	9	В	5.1A, 5.1B. 5.1F
	operations, and the relationship to the multiplication of whole numbers	39	С	5.1A, 5.1B, 5.1F
5.3F	represent quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using objects and pictorial models, including area models	10	н	5.1B, 5.1D, 5.1F
5.3G	solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number	4	н	5.1A, 5.1B, 5.1F
	divisors, using strategies and algorithms, including the standard algorithm	44	G	5.1B, 5.1F
5.3H	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	6	F	5.1A, 5.1B, 5.1E, 5.1F
5.3I	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	50	J	5.1B, 5.1D, 5.1F
5.3J	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	21	В	5.1B, 5.1D, 5.1F
5.3K	add and subtract positive rational numbers fluently	18	F	5.1A, 5.1B, 5.1F
		24	F	5.1A, 5.1B, 5.1E, 5.1F
		35	Α	5.1A, 5.1B, 5.1F
5.3L	divide whole numbers by unit fractions and unit	13	С	5.1A, 5.1B, 5.1F
	ractions by whole numbers	37	128	5.1A, 5.1B, 5.1F
5.4B	represent and solve multi-step problems involving	14	J	5.1A, 5.1B, 5.1D, 5.1F
	equations with a letter standing for the unknown quantity	30	F	5.1A, 5.1B, 5.1E, 5.1F
		41	В	5.1A, 5.1B, 5.1F
5.4C	generate a numerical pattern when given a rule in the form $y = ay$ or $y = x + a$ and graph	16	G	5.1B, 5.1D, 5.1F
		32	G	5.1A, 5.1B, 5.1D, 5.1F
		48	F	5.1A, 5.1B, 5.1D, 5.1F
5.4D	recognize the difference between additive and multiplicative numerical patterns given in a table or graph	46	J	5.1B, 5.1E, 5.1G

Shaded - Readiness TEKS, NT - Not Tested Readiness TEKS - 15/24 questions

Category 3 Geometry and Measurement 12 Total Ouestions

TEKS	Item	Correct Answer	Process TEKS
5.4H represent and solve problems related	17	Α	5.1A, 5.1B, 5.1C, 5.1E, 5.1F
volume	31	D	5.1A, 5.1B, 5.1C, 5.1E, 5.1F
	43	Α	5.1B, 5.1C, 5.1E, 5.1F
5.5A classify two-dimensional figures in a hierarchy of sets and subsets using	28	F	5.1A, 5.1B, 5.1E, 5.1F
graphic organizers based on their attributes and properties	47	В	5.1B, 5.1E, 5.1F
5.6A 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	3	A	5.1A, 5.1B, 5.1C, 5.1E, 5.1F
5.6B 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	12	294	5.1A, 5.1B, 5.1C, 5.1F
5.7A solve problems by calculating conversions within a measurement system, customary or metric	7	С	5.1A, 5.1B, 5.1C, 5.1F
5.8A describe the key attributes of the coordinate plane, including perpendicular number lines (axes) where the intersection (origin) of the two lines coincides with zero on each number line and the given point (0, 0); the x-coordinate, the first number in an ordered pair, indicates movement parallel to the x-axis starting at the origin; and the y-coordinate, the second number, indicates movement parallel to the y-axis starting at the origin	40	J	5.1A, 5.1B, 5.1G
5.8B describe the process for graphing ordered pairs of numbers in the first quadrant of the coordinate plane	NT		
5.8C graph in the first quadrant of the coordinate plane ordered pairs of	15	С	5.1A, 5.1B, 5.1E, 5.1G
numbers arising from mathematical and real-world problems, including	26	н	5.1B, 5.1D, 5.1F
those generated by number patterns or found in an input-output table	36	J	5.1B, 5.1E, 5.1F

Shaded - Readiness TEKS, NT - Not Tested Readiness TEKS - 8/12 questions

Category 4 Data Analysis and Personal Finance 6 Total Ouestions

TEKS	Item	Correct Answer	Process TEKS
5.9A represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots	NT		
5.9B represent discrete paired data on a scatterplot	11	Α	5.1A, 5.1B, 5.1D, 5.1F
5.9C solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot	19	С	5.1A, 5.1B, 5.1E, 5.1F
	29	С	5.1A, 5.1B, 5.1E, 5.1F
	38	G	5.1A, 5.1B, 5.1E, 5.1F
5.10A define income tax, payroll tax, sales tax, and property tax	45	D	5.1G
5.10B explain the difference between gross income and net income	NT		
5.10E describe actions that might be taken to balance a budget when expenses exceed income	NT		
5.10F balance a simple budget	22	F	5.1A, 5.1B, 5.1E, 5.1F

Shaded - Readiness TEKS, NT - Not Tested Readiness TEKS - 3/6 questions