

TEST ADMINISTRATOR MANUAL

GRADE 4 Mathematics STAAR Alternate 2

Administered April 2016

RELEASED

Copyright © 2016, Texas Education Agency. All rights reserved. Reproduction of all or portions of this work is prohibited without express written permission from the Texas Education Agency.

Texas Essential Knowledge and Skills (TEKS) Curriculum Assessed

Grade 4 Mathematics		Cluster 1
Reporting Category 4	Data Analysis and Personal Finan will demonstrate an understandir and analyze data and how to des financial concepts.	ng of how to represent
Knowledge and Skills Statement 4.9	The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data.	
Essence Statement	Uses graphs to organize and inte	rpret data.
Item 1 Prerequisite Skill	draw conclusions from real-objec	t and picture graphs (K)
Item 2 Prerequisite Skill	draw conclusions from real-objec	t and picture graphs (K)
Item 3 Prerequisite Skill	draw conclusions and generate a using information from picture ar	
Item 4 Prerequisite Skill	draw conclusions and generate a using information from picture ar	

Grade 4 Mathematics		Cluster 2	
Reporting Category 1	Numerical Representations and R student will demonstrate an under represent and manipulate number	erstanding of how to	
Knowledge and Skills Statement 4.3	The student applies mathematica represent and generate fractions		
Essence Statement	Models and finds relationships among fractional units.		
Item 5 Prerequisite Skill	partition two-dimensional figures shares or equal parts and describ (1)		
Item 6 Prerequisite Skill	partition two-dimensional figures shares or equal parts and describ (1)		
Item 7 Prerequisite Skill	identify examples and non-examples and eighths (2)	ples of halves, fourths,	
Item 8 Prerequisite Skill	partition objects into equal parts including halves, fourths, and eig		

Grade 4 Mathematics		Cluster 3
Reporting Category 1	Numerical Representations and R student will demonstrate an under represent and manipulate number	erstanding of how to
Knowledge and Skills Statement 4.2	The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value.	
Essence Statement	Uses number relationships to demonstrate an understanding of place value.	
Item 9 Prerequisite Skill	demonstrate use of location words (such as "over," "under," "above," "on," "beside," "next to," "between," "in front of," "near," "far," etc.) (P-K)	
Item 10 Prerequisite Skill	order whole numbers up to 120 using place value and open number lines (1)	
Item 11 Prerequisite Skill	order whole numbers up to 120 using place value and open number lines (1)	
Item 12 Prerequisite Skill	use place value to compare and c up to 1,200 using comparative la symbols (>,<, or =) (2)	

Grade 4 Mathematics	Cluster 4	
Reporting Category 3	Geometry and Measurement: The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.	
Knowledge and Skills Statement 4.8	The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement.	
Essence Statement	Solves problems involving length, time, liquid volume, mass/weight, or money.	
Item 13 Prerequisite Skill	recognize how much can be placed within an object (P-	-K)
Item 14 Prerequisite Skill	compare two objects with a common measurable attrib to see which object has more of/less of the attribute ar describe the difference (K)	
Item 15 Prerequisite Skill	compare two objects with a common measurable attrib to see which object has more of/less of the attribute ar describe the difference (K)	
Item 16 Prerequisite Skill	give an example of a measurable attribute of a given object, including length, capacity, and weight (K)	

Grade 4 Mathematics		Cluster 5
Reporting Category 2	Computations and Algebraic Relationships: The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.	
Knowledge and Skills Statement 4.5	The student applies mathematical process standards to develop concepts of expressions and equations.	
Essence Statement	Models or solves problems involving whole number relationships.	
Item 17 Prerequisite Skill	recognize and create patterns (P-K)	
Item 18 Prerequisite Skill	recognize and create patterns (P-	-К)
Item 19 Prerequisite Skill	solve word problems using object sums up to 10 and differences wi	
Item 20 Prerequisite Skill	explain strategies used to solve a problems up to 20 using spoken models, and number sentences (words, objects, pictorial

Additional resources for STAAR Alternate 2, including the STAAR Alternate 2 Test Administrator Manual and the STAAR Alternate 2 Educator Guide, are available online: http://tea.texas.gov/student.assessment/ special-ed/staaralt/

MATHEMATICS

- Present Stimulus 1.
- *Direct* the student to Stimulus 1. *Communicate:* This is one row of a graph about free-time choices. Two students in a class chose art during free time. One. Two.
- Communicate: Find where the graph shows that two students chose art.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the two students,		mark A for question 1 and move to question 2.	
If the student does not find the two students,		 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 	
After the five-second wait time, if the student finds the two students,		mark B for question 1 and move to question 2.	
After the five-second wait time, if the student does not find the two students,		mark C for question 1 and move to question 2.	

- Present Stimulus 2a and 2b.
- *Direct* the student to Stimulus 2a. *Communicate:* This graph shows that students in a class chose art or music during free time.
- *Direct* the student to each row in Stimulus 2a. *Communicate:* **Two students chose art. One. Two. Three students chose music. One. Two. Three.**
- Direct the student to each answer choice in Stimulus 2b.
- Communicate: Find the three students who chose music.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the three students in Stimulus 2b,	-	mark A for question 2 and move to question 3.
If the student does not find the three students in Stimulus 2b,	-	 model the desired student action by finding the three students in Stimulus 2b and <i>communicate</i> "Three students chose music"; and replicate the initial presentation instructions.
After teacher modeling, if the student finds the three students in Stimulus 2b,	-	mark B for question 2 and move to question 3.
After teacher modeling, if the student does not find the three students in Stimulus 2b,	-	mark C for question 2 and move to question 3.

- Present Stimulus 3a and 3b.
- *Direct* the student to Stimulus 3a. *Communicate:* This graph shows the number of times a student rode a bus to school in March, April, and May.
- Direct the student to each answer choice in Stimulus 3b.
- Communicate: Find the number of times the student rode the bus in April.

Stimulus 3a						
	Riding the Bus					
	March					
	April					
	Μαγ					
			-			
Stimulus 3b	5	*12 9				

Scoring Instructions		
Student Action		Test Administrator Action
If the student finds "12" in Stimulus 3b,	-	mark A for question 3 and move to question 4.
If the student does not find "12" in Stimulus 3b,	•	 provide one of these allowable teacher assists to the student: Have the student match the numbers from the answer choices to the corresponding row of buses. OR Have the student point to and/or count the number of buses that are in each row of the pictograph. OR Have the student identify the name of the month for each row of data on the graph. Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds "12" in Stimulus 3b,	-	mark B for question 3 and move to question 4.
After the selected teacher assistance, if the student does not find "12" in Stimulus 3b,	-	mark C for question 3 and move to question 4.

- Present Stimulus 4a and 4b.
- *Direct* the student to Stimulus 4a. *Communicate:* This graph shows how many goals a soccer team scored in three different games.
- *Direct* the student to each answer choice in Stimulus 4b.
- Communicate: Find the total number of goals the team scored in all three games.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds "11" in Stimulus 4b,	-	mark A for question 4 and move to question 5.	
If the student does not find "11" in Stimulus 4b,	-	replicate the initial presentation instructions.	
After the teacher repeats the instructions, if the student finds "11" in Stimulus 4b,	-	mark B for question 4 and move to question 5.	
After the teacher repeats the instructions, if the student does not find "11" in Stimulus 4b,	-	mark C for question 4 and move to question 5.	

- Present Stimulus 5.
- *Direct* the student to the whole pizza. *Communicate:* **This is a whole pizza.**
- *Direct* the student to the pizza that is cut in half. Point to each half and the knife. *Communicate:* **This pizza is cut into two halves.**
- Communicate: Find the pizza that is cut into two halves.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the pizza that is cut into two halves,		mark A for question 5 and move to question 6.	
If the student does not find the pizza that is cut into two halves,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 	
After the five-second wait time, if the student finds the pizza that is cut into two halves,		mark B for question 5 and move to question 6.	
After the five-second wait time, if the student does not find the pizza that is cut into two halves,	-	mark C for question 5 and move to question 6.	

- Present Stimulus 6a and 6b.
- Direct the student to each fraction in Stimulus 6a. Communicate: One half. One half.
- *Direct* the student to the two halves of the pizza in Stimulus 6a. *Communicate:* **This pizza is cut into two halves.**
- Direct the student to each answer choice in Stimulus 6b without referencing "half" or "whole."
- Communicate: Find the sandwich that is cut into two halves.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the sandwich cut into two halves,	-	mark A for question 6 and move to question 7.
If the student does not find the sandwich cut into two halves,		 model the desired student action by finding the sandwich cut into two halves and <i>communicate</i> "This is the sandwich cut into two halves"; and replicate the initial presentation instructions.
After teacher modeling, if the student finds the sandwich cut into two halves,	-	mark B for question 6 and move to question 7.
After teacher modeling, if the student does not find the sandwich cut into two halves,	-	mark C for question 6 and move to question 7.

- Present Stimulus 7a and 7b.
- Direct the student to Stimulus 7a. Communicate: This fraction is one-fourth.
- *Direct* the student to each answer choice in Stimulus 7b. *Communicate:* **These squares are shaded to show different fractions.**
- Communicate: Find the square that is shaded to show one-fourth.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the square shaded to show one-fourth,	-	mark A for question 7 and move to question 8.		
		provide one of these allowable teacher assists to the student:		
If the student does not find the square shaded to show one-fourth,	-	 Have the student point to and/or count the parts in each answer choice. OR Have the student arrange manipulatives to represent each answer choice. 		
		Replicate the initial presentation instructions.		
After the selected teacher assistance, if the student finds the square shaded to show one-fourth,	-	mark B for question 7 and move to question 8.		
After the selected teacher assistance, if the student does not find the square shaded to show one-fourth,	-	mark C for question 7 and move to question 8.		

- Present Stimulus 8.
- Direct the student to each answer choice in Stimulus 8.
- Communicate: Find the figure that is shaded to show two out of three parts.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the circle,	-	mark A for question 8 and move to question 9.		
If the student does not find the circle,	-	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds the circle,	-	mark B for question 8 and move to question 9.		
After the teacher repeats the instructions, if the student does not find the circle,	-	mark C for question 8 and move to question 9.		

- Present Stimulus 9.
- Direct the student to the star on the number 1 in Stimulus 9. Communicate: One.
- *Direct* the student to the number 1. *Communicate:* This is the number 1.
- Direct the student to each star on the number 2 in Stimulus 9. Communicate: One. Two.
- Direct the student to the number 2. Communicate: This is the number 2.
- Communicate: The numbers 1 and 2 are next to each other.
- Communicate: Find the numbers that are next to each other.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the numbers that are next to each other,	-	mark A for question 9 and move to question 10.		
If the student does not find the numbers that are next to each other,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 		
After the five-second wait time, if the student finds the numbers that are next to each other,	-	mark B for question 9 and move to question 10.		
After the five-second wait time, if the student does not find the numbers that are next to each other,	-	mark C for question 9 and move to question 10.		

- Present Stimulus 10a and 10b.
- Direct the student to the numbers 1 and 2 in Stimulus 10a. Communicate: One. Two.
- Direct the student to each star on the number 3. Communicate: One. Two. Three.
- *Direct* the student to the number 3. *Communicate:* This is the number three.
- *Direct* the student to each number in Stimulus 10a. *Communicate:* First comes one, then two, then three.
- *Direct* the student to the numbers and the empty box in Stimulus 10b. *Communicate:* **One.Two.The number that comes after two is missing.**
- *Direct* the student back to Stimulus 10a.
- Communicate: Find the number that comes after two.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the number 3,	-	mark A for question 10 and move to question 11.		
If the student does not find the number 3,	-	 model the desired student action by finding the number 3 and <i>communicate</i> "Three comes after two"; and replicate the initial presentation instructions. 		
After teacher modeling, if the student finds the number 3,	-	mark B for question 10 and move to question 11.		
After teacher modeling, if the student does not find the number 3,	-	mark C for question 10 and move to question 11.		

- Present Stimulus 11a and 11b.
- *Direct* the student to each number and each empty box in Stimulus 11a. *Communicate:* **One.Two. Three. Four. Five. Six. A number is missing. Eight. Another number is missing. Ten.**
- *Direct* the student to each answer choice in Stimulus 11b. *Communicate* each answer choice.
- Communicate: Find the two missing numbers.

Stimulus 11a	1 2 3 4 5 6 8 10
Stimulus 11b	7 and 8 9 and 11 * 7 and 9

Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds "7 and 9" in Stimulus 11b,	-	mark A for question 11 and move to question 12.		
		provide one of these allowable teacher assists to the student:		
If the student does not find "7 and 9" in Stimulus 11b,		 Have the student identify how much the numbers in Stimulus 11a go up. OR Have the student count from one to ten. OR Allow the student to use a number line or number chart. 		
		Replicate the initial presentation instructions.		
After the selected teacher assistance, if the student finds "7 and 9" in Stimulus 11b,	-	mark B for question 11 and move to question 12.		
After the selected teacher assistance, if the student does not find "7 and 9" in Stimulus 11b,	-	mark C for question 11 and move to question 12.		

- Present Stimulus 12a and 12b.
- *Direct* the student to Stimulus 12a. *Communicate:* Here is a row of numbers.
- Direct the student to each answer choice in Stimulus 12b.
- Communicate: Find the two numbers that come after 12 but before 15.

Stimulus 12a	11	12	13	14	15	16
Stimulus 12b	11 and	13	* <mark>13</mark> ar	nd 14	14	and 16

Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds "13 and 14" in Stimulus 12b,	-	mark A for question 12 and move to question 13.		
If the student does not find "13 and 14" in Stimulus 12b,	-	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds "13 and 14" in Stimulus 12b,	-	mark B for question 12 and move to question 13.		
After the teacher repeats the instructions, if the student does not find "13 and 14" in Stimulus 12b,	-	mark C for question 12 and move to question 13.		

- Present Stimulus 13.
- *Direct* the student to the first answer choice. *Communicate:* This is a measuring cup with a small amount of water. It has less than one cup of water in it.
- *Direct* the student to the second answer choice. *Communicate:* This is a measuring cup that has more than one cup of water in it. It is completely full.
- Communicate: Find the measuring cup that is completely full.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the measuring cup that is completely full,	-	mark A for question 13 and move to question 14.		
If the student does not find the measuring cup that is completely full,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 		
After the five-second wait time, if the student finds the measuring cup that is completely full,	-	mark B for question 13 and move to question 14.		
After the five-second wait time, if the student does not find the measuring cup that is completely full,	-	mark C for question 13 and move to question 14.		

- Present Stimulus 14a and 14b.
- *Direct* the student to Stimulus 14a. *Communicate:* A student has a measuring cup that is completely full of water.
- *Direct* the student to each answer choice in Stimulus 14b. *Communicate:* Here are two other measuring cups that are completely full of water.
- Communicate: Find the measuring cup that is holding the same amount of water as the student's measuring cup.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the one-cup measuring cup in Stimulus 14b,	-	mark A for question 14 and move to question 15.		
If the student does not find the one-cup measuring cup in Stimulus 14b,	-	 model the desired student action by finding the one-cup measuring cup in Stimulus 14b and <i>communicate</i> "This is the measuring cup that is holding the same amount of water as the student's measuring cup"; and replicate the initial presentation instructions. 		
After teacher modeling, if the student finds the one-cup measuring cup in Stimulus 14b,	-	mark B for question 14 and move to question 15.		
After teacher modeling, if the student does not find the one-cup measuring cup in Stimulus 14b,	-	mark C for question 14 and move to question 15.		

- Present Stimulus 15a and 15b.
- Direct the student to Stimulus 15a. Communicate: A student has an empty glass.
- *Direct* the student to each answer choice in Stimulus 15b. *Communicate:* Here are glasses of different sizes.
- Communicate: Find the glass that can hold more water than the student's glass.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the largest glass in Stimulus 15b,	-	mark A for question 15 and move to question 16.		
		provide one of these allowable teacher assists to the student:		
If the student does not find the largest glass in Stimulus 15b,		 Have the student identify the size of each glass. OR Highlight the outline of each glass. OR Trace the outline of each glass. 		
		Replicate the initial presentation instructions.		
After the selected teacher assistance, if the student finds the largest glass in Stimulus 15b,	-	mark B for question 15 and move to question 16.		
After the selected teacher assistance, if the student does not find the largest glass in Stimulus 15b,	-	mark C for question 15 and move to question 16.		

- Present Stimulus 16.
- *Direct* the student to each answer choice. *Communicate:* Here are three different sizes of milk cartons.
- Communicate: Find the set of milk cartons that is in order from the carton that holds the most to the carton that holds the least.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the cartons that are in the order of gallon, quart, pint,	-	mark A for question 16 and move to question 17.		
If the student does not find the cartons that are in the order of gallon, quart, pint,	-	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds the cartons that are in the order of gallon, quart, pint,	-	mark B for question 16 and move to question 17.		
After the teacher repeats the instructions, if the student does not find the cartons that are in the order of gallon, quart, pint,	-	mark C for question 16 and move to question 17.		

- Present Stimulus 17.
- *Direct* the student to Stimulus 17. *Communicate:* These CDs show a number pattern that goes up by one.
- *Direct* the student to each number and the CDs next to it. *Communicate:* **Three. Four. Five.**
- Communicate: Find the CDs that show the number pattern.



Scoring Instructions			
Student Action	Test Administrator Action		
If the student finds the CDs that show the number pattern,	➡ mark A for question 17 and move to question 18.		
If the student does not find the CDs that show the number pattern,	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 		
After the five-second wait time, if the student finds the CDs that show the number pattern,	➡ mark B for question 17 and move to question 18.		
After the five-second wait time, if the student does not find the CDs that show the number pattern,	➡ mark C for question 17 and move to question 18.		

- Present Stimulus 18a and 18b.
- *Direct* the student to the CDs in Stimulus 18a. *Communicate:* These CDs show a number pattern that goes up by one.
- Direct the student to the empty box. Communicate: The numbers are missing.
- *Direct* the student to the first answer choice in Stimulus 18b. *Communicate:* This is a number pattern. Three, four, five, six.
- *Direct* the student to the second answer choice in Stimulus 18b. *Communicate:* **This is another number pattern. One, three, five, seven.**
- Communicate: Find the number pattern shown by the CDs.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the numbers 3, 4, 5, 6 in Stimulus 18b,	-	mark A for question 18 and move to question 19.	
If the student does not find the numbers 3, 4, 5, 6 in Stimulus 18b,	-	 model the desired student action by finding 3, 4, 5, 6 and <i>communicate</i> "This is the number pattern shown by the CDs"; and replicate the initial presentation instructions. 	
After teacher modeling, if the student finds the numbers 3, 4, 5, 6 in Stimulus 18b,	-	mark B for question 18 and move to question 19.	
After teacher modeling, if the student does not find the numbers 3, 4, 5, 6 in Stimulus 18b,	-	mark C for question 18 and move to question 19.	

- Present Stimulus 19a and 19b.
- Direct the student to Stimulus 19a. Communicate: These figures show a number pattern.
- *Direct* the student to the empty box. *Communicate:* **The row that comes next in the pattern is missing.**
- Direct the student to each answer choice in Stimulus 19b.
- Communicate: Find the row that comes next in the pattern.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds "7,"	-	mark A for question 19 and move to question 20.	
		provide one of these allowable teacher assists to the student:	
If the student does not find "7,"	-	 Have the student identify how much the numbers in Stimulus 19a go up. OR Allow the student to use a number line or number chart. OR Highlight 1, 3, and 5 in Stimulus 19a. 	
		Replicate the initial presentation instructions.	
After the selected teacher assistance, if the student finds "7,"	-	mark B for question 19 and move to question 20.	
After the selected teacher assistance, if the student does not find "7,"	-	mark C for question 19 and move to question 20.	

- Present Stimulus 20a and 20b.
- *Direct* the student to Stimulus 20a. *Communicate:* This is a number pattern. Six. Eight. Ten. Twelve. Fourteen.
- *Direct* the student to the stem and each answer choice in Stimulus 20b. *Communicate* the text in the stem and each answer choice.
- Communicate: Find the words that tell the pattern.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds "go up by 2,"	-	mark A for question 20.		
If the student does not find "go up by 2,"	-	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds "go up by 2,"	-	mark B for question 20.		
After the teacher repeats the instructions, if the student does not find "go up by 2,"	-	mark C for question 20.		

TEST ADMINISTRATOR MANUAL

STAAR ALTERNATE 2 GRADE 4 Mathematics April 2016