

State of Texas Assessments of Academic Readiness

TEST INSTRUCTIONS

GRADE 4 Mathematics STAAR Alternate 2

Administered April 2023

RELEASED

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Texas Essential Knowledge and Skills (TEKS) Curriculum Assessed

Math Grade 4		Cluster 1
Reporting Category 3	Geometry and Measurement: The student will demonstrate	
	an understanding of how to repres	ent and apply geometry
	and measurement concepts.	
Knowledge and Skills Statement 4.6	The student applies mathematical	process standards to
-	analyze geometric attributes in ord	ler to develop
	generalizations about their propert	ies.
Essence Statement	Identifies one-and two-dimensional geometric figures usi	
	attributes.	
Item 1 Prerequisite Skill	identify attributes of two-dimensio	nal shapes using informal
•	and formal geometric language int	erchangeably (K)
Item 2 Prerequisite Skill	identify attributes of two-dimensio	
	and formal geometric language int	
Item 3 Prerequisite Skill	classify and sort regular and irregu	
	shapes based on attributes using i	nformal geometric
	language (1)	
Item 4 Prerequisite Skill	classify and sort regular and irregu	
	shapes based on attributes using i	nformal geometric
	language (1)	

Math Grade 4	Cluster 2	
Reporting Category 4	Data Analysis and Personal Financial Literacy: The student will demonstrate an understanding of how to represent and analyze data and how to describe and apply personal financial concepts.	
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 interpret data.	
Item 5 Prerequisite Skill	use data to create real- object and picture graph (K)	
Item 6 Prerequisite Skill	use data to create real- object and picture graph (K)	
Item 7 Prerequisite Skill	draw conclusions and generate and answer questions using information from picture and bar-type graphs (1)	
Item 8 Prerequisite Skill	use data to create picture and bar-type graphs (1)	

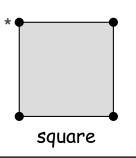
Math Grade 4	Cluster 3			
Reporting Category 1	Numerical Representations and Relationships: The student			
	will demonstrate an understanding of how to represent and			
	manipulate numbers and expressions.			
Knowledge and Skills Statement 4.2	The student applies mathematical process standards to			
_	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	use comparative language to describe two numbers up to 20 presented as written numerals (K)			
Item 10 Prerequisite Skill	use comparative language to describe two numbers up to 20 presented as written numerals (K)			
Item 11 Prerequisite Skill	represent the comparison of two numbers to 100 using the symbols $>,<$, or = (1)			
Item 12 Prerequisite Skill	represent the comparison of two numbers to 100 using the symbols >,<, or = (1)			

Math Grade 4		Cluster 4
Reporting Category 2	Computation 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 involvir relationships.	ng whole number
Item 13 Prerequisite Skill	model the action of joining to repr action of separating to represent s	
Item 14 Prerequisite Skill	model the action of joining to repr action of separating to represent s	
Item 15 Prerequisite Skill	generate and solve problem situat sentence involving addition or sub- 20 (1)	
Item 16 Prerequisite Skill	understand that the equal sign rep where expressions on each side of the same value(s) (1)	

Math Grade 4	Cluster 5	
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 tool to solve problems involving measurement.	
Essence Statement	Solves problems involving length, time, liquid volume, mass/weight, or money.	
Item 17 Prerequisite Skill	use language to describe concepts associated with the passing of time (PK)	
Item 18 Prerequisite Skill	use language to describe concepts associated with the passing of time (PK)	
Item 19 Prerequisite Skill	tell time to the hour and half hour using analog and digital clocks (1)	
Item 20 Prerequisite Skill	tell time to the hour and half hour using analog and digital clocks (1)	

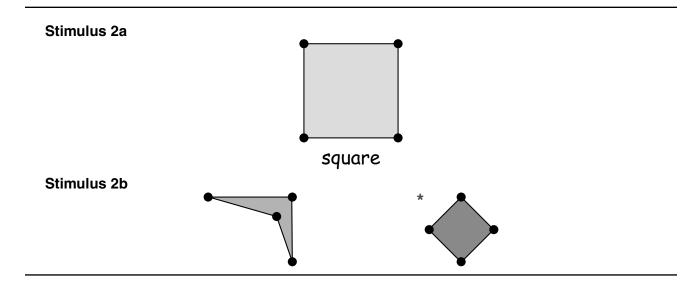
MATHEMATICS

- Present Stimulus 1.
- *Direct* the student to Stimulus 1. *Communicate:* This shape has four sides and four corners. It is a square.
- Communicate: Find the square with four sides and four corners.



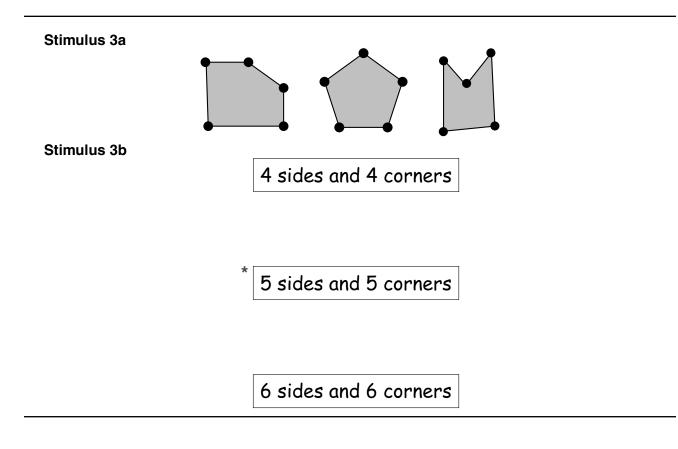
Scoring Instructions		
Student Action Test Administrator Action		Test Administrator Action
If the student finds the square,	•	mark A for question 1 and move to question 2.
If the student does not find the square,	•	 remove the stimulus; wait at least five seconds; and replicate the initial presentation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

- Present Stimulus 2a and 2b.
- *Direct* the student to Stimulus 2a. *Communicate:* This square has four sides and four corners. All the sides are the same length.
- Direct the student to each answer choice in Stimulus 2b. Communicate: Quadrilateral. Square.
- Communicate: Find the shape where all the sides are the same length.



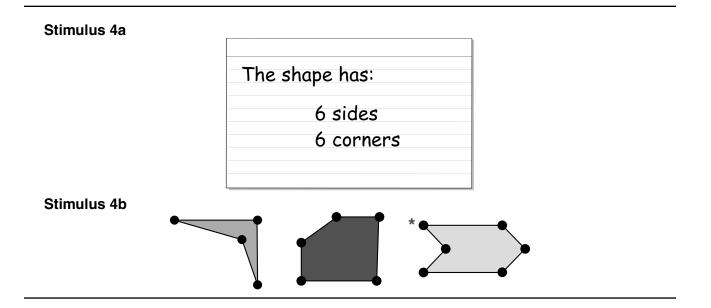
Scoring Instructions		
Student Action	Test Administrator Action	
If the student finds the square in Stimulus 2b,	•	mark A for question 2 and move to question 3.
If the student does not find the square in Stimulus 2b,	•	 model the desired student action by finding the square in Stimulus 2b and <i>communicate</i> "This is the shape where all the sides are the same length"; and replicate the initial presentation instructions.
After teacher modeling, if the student finds the square in Stimulus 2b,	•	mark B for question 2 and move to question 3.
After teacher modeling, if the student does not find the square 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:* These shapes are sorted based on their number of sides and corners.
- Direct the student to each answer choice in Stimulus 3b. Communicate the text in each answer choice.
- Communicate: Find the number of sides and corners in each shape in the group.



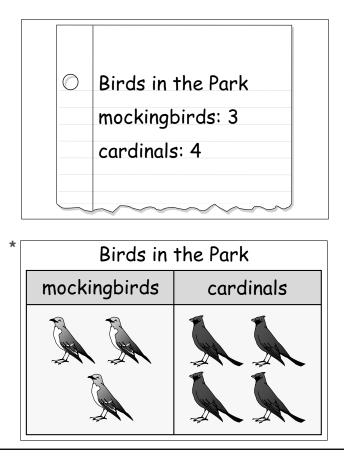
Scoring Instructions		
Student Action		Test Administrator Action
If the student finds "5 sides and 5 corners" in Stimulus 3b,	•	mark A for question 3 and move to question 4.
		provide <i>one</i> of these allowable teacher assists to the student:
If the student does not find "5 sides and 5 corners" in Stimulus 3b,	•	 Have the student count the sides of each shape in Stimulus 3a. OR Highlight the sides of each shape in Stimulus 3a. OR Highlight the corners of each shape in Stimulus 3a as the student counts. Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds "5 sides and 5 corners" in Stimulus 3b,	•	mark B for question 3 and move to question 4.
After the selected teacher assistance, if the student does not find "5 sides and 5 corners" 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:* **Teddi drew a shape based on the description** from the index card. *Communicate* the text in Stimulus 4a.
- Direct the student to each answer choice in Stimulus 4b.
- Communicate: Find the shape Teddi drew.



Scoring Instructions		
Student Action	Test Administrator Action	
If the student finds the shape with 6 sides and 6 corners in Stimulus 4b,	•	mark A for question 4 and move to question 5.
If the student does not find the shape with 6 sides and 6 corners in Stimulus 4b,	•	replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds the shape with 6 sides and 6 corners 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 the shape with 6 sides and 6 corners in Stimulus 4b,	•	mark C for question 4 and move to question 5.

- Present Stimulus 5. Communicate: Carmen is bird-watching in the park.
- *Direct* the student to the list of data in Stimulus 5. *Communicate:* This list of data represents the number of birds Carmen saw. *Communicate* the information in the list.
- *Direct* the student to the picture graph in Stimulus 5. *Communicate:* This picture graph represents the same information as the list of data.
- Communicate: Find the picture graph.



Scoring Instructions		
Student Action	Action Test Administrator Action	
If the student finds the picture graph,	•	mark A for question 5 and move to question 6.
If the student does not find the picture graph,	•	 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 picture graph,	•	mark B for question 5 and move to question 6.
After the five-second wait time, if the student does not find the picture graph,	•	mark C for question 5 and move to question 6.

- Present Stimulus 6a and 6b. Communicate: Carmen is bird-watching in the park.
- *Direct* the student to Stimulus 6a. *Communicate:* The picture graph represents the number of birds Carmen saw.
- *Direct* the student to each answer choice in Stimulus 6b. *Communicate* the information in each answer choice.
- Communicate: Find the list of data that represents the same information as the picture graph.

Birds in the Park

mockingbirds	cardinals

Stimulus 6a

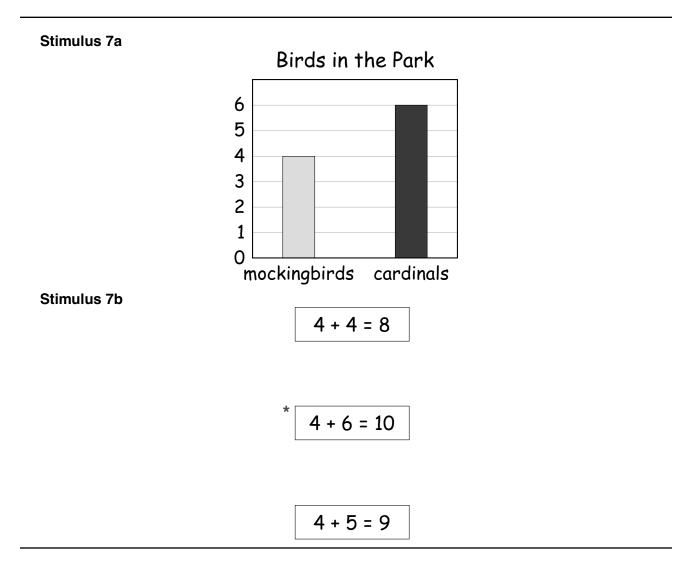
Stimulus 6b

\bigcirc	Birds in the Park
	mockingbirds: 3
	cardinals: 5

0	Birds in the Park mockingbirds: 3 cardinals: 4

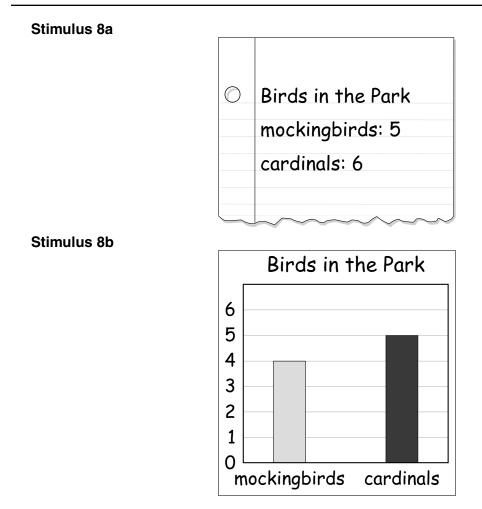
Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the list with mockingbirds: 3, cardinals: 5 in Stimulus 6b,		mark A for question 6 and move to question 7.		
If the student does not find the list with mockingbirds: 3, cardinals: 5 in Stimulus 6b,	•	 model the desired student action by finding the list with mockingbirds: 3, cardinals: 5 in Stimulus 6b and <i>communicate</i> "This list of data represents the same information as the picture graph"; and replicate the initial presentation instructions. 		
After teacher modeling, if the student finds the list with mockingbirds: 3, cardinals: 5 in Stimulus 6b,		mark B for question 6 and move to question 7.		
After teacher modeling, if the student does not find the list with mockingbirds: 3, cardinals: 5 in Stimulus 6b,	•	mark C for question 6 and move to question 7.		

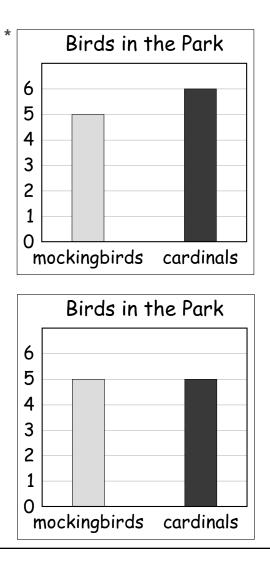
- Present Stimulus 7a and 7b. Communicate: Carmen was bird-watching in the park.
- *Direct* the student to Stimulus 7a. *Communicate:* This bar graph shows the number of birds Carmen saw. *Communicate* the information in the graph.
- *Direct* the student to each answer choice in Stimulus 7b. *Communicate* the information in each answer choice.
- Communicate: Find the number sentence that shows the total number of birds Carmen saw in the park.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds " $4 + 6 = 10$ " in Stimulus 7b,	► mark A for question 7 and move to question 8.			
If the student does not find "4 + 6 = 10" in Stimulus 7b,		provide <i>one</i> of these allowable teacher assists to the student:		
		 Have the student label each bar on the bar graph in Stimulus 7a with the number. OR Label each bar on the bar graph in Stimulus 7a as the student counts. 		
		Replicate the initial presentation instructions.		
After the selected teacher assistance, if the student finds " $4 + 6 = 10$ " in Stimulus 7b,	•	mark B for question 7 and move to question 8.		
After the selected teacher assistance, if the student does not find " $4 + 6 = 10$ " in Stimulus 7b,	•	mark C for question 7 and move to question 8.		

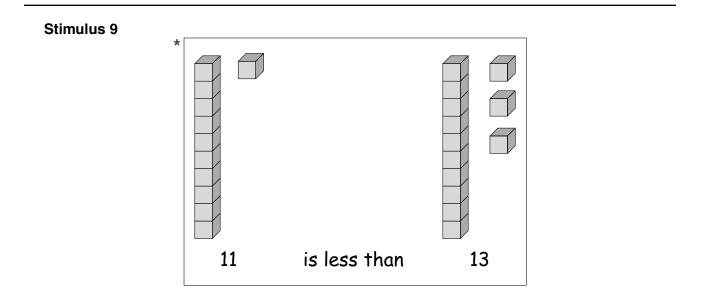
- Present Stimulus 8a and 8b. Communicate: Carmen is bird-watching in the park.
- *Direct* the student to Stimulus 8a. *Communicate:* This list of data shows the number of birds Carmen saw throughout the day. *Communicate* the information in the list.
- *Direct* the student to each answer choice in Stimulus 8b. *Communicate* the information in each answer choice.
- Communicate: Find the bar graph with the same data as the list.





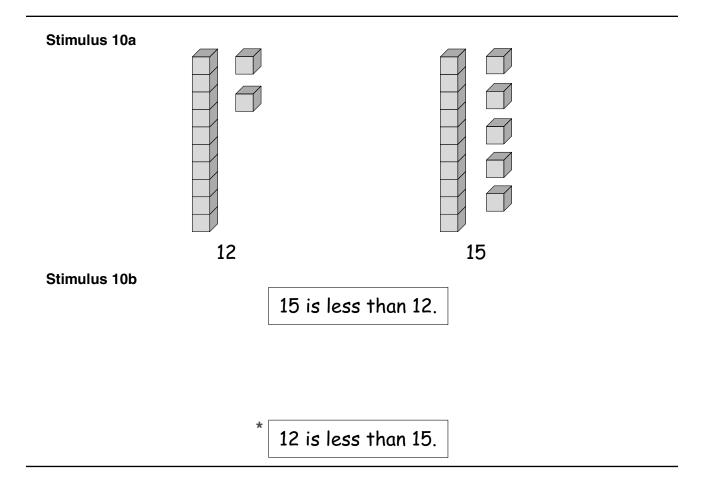
Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the bar graph showing 5 mockingbirds and 6 cardinals in Stimulus 8b,	•	mark A for question 8 and move to question 9.		
If the student does not find the bar graph showing 5 mockingbirds and 6 cardinals in Stimulus 8b,	•	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds the bar graph showing 5 mockingbirds and 6 cardinals in Stimulus 8b,		mark B for question 8 and move to question 9.		
After the teacher repeats the instructions, if the student does not find the bar graph showing 5 mockingbirds and 6 cardinals in Stimulus 8b,	•	mark C for question 8 and move to question 9.		

- Present Stimulus 9.
- *Direct* the student to the model on the left in Stimulus 9. *Communicate:* This model represents the number 11.
- *Direct* the student to the model on the right in Stimulus 9. *Communicate:* This model represents the number 13. Eleven is less than 13.
- Communicate: Find the models that show 11 is less than 13.



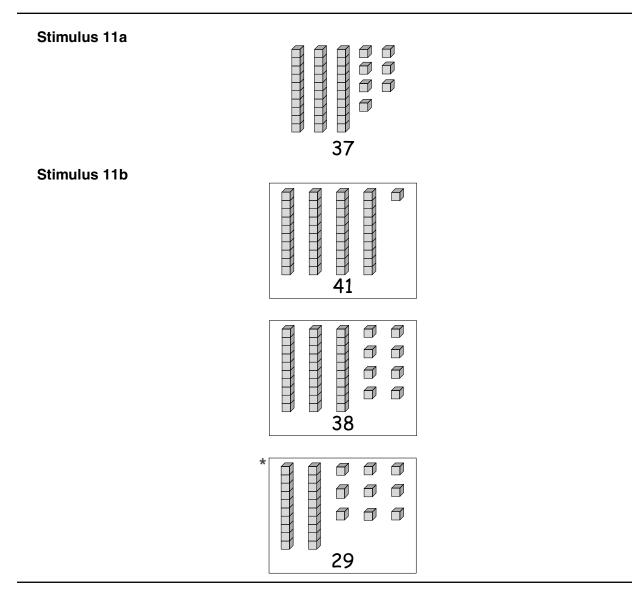
Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the models,		mark A for question 9 and move to question 10.		
If the student does not find the models,	•	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 		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

- *Present* Stimulus 10a and 10b.
- *Direct* the student to Stimulus 10a. *Communicate:* This model represents the number 12. This model represents the number 15. Twelve is less than 15.
- *Direct* the student to each answer choice in Stimulus 10b. *Communicate* the text in each answer choice.
- Communicate: Find the sentence that describes the relationship between 12 and 15.



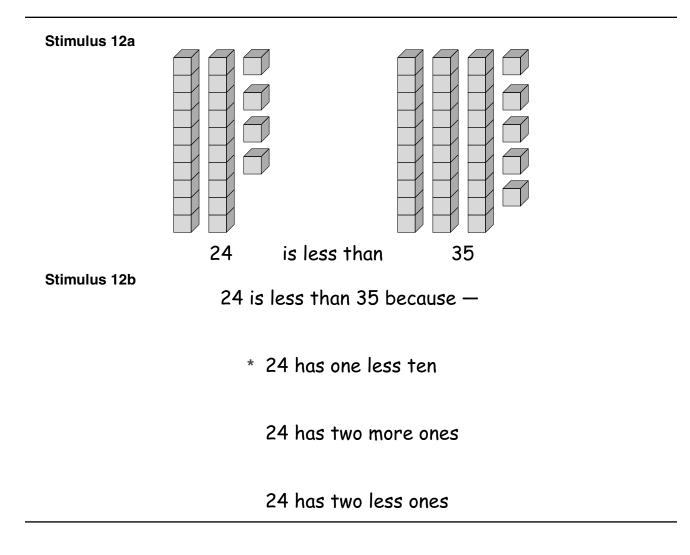
Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds "12 is less than 15" in Stimulus 10b,	•	mark A for question 10 and move to question 11.		
If the student does not find "12 is less than 15" in Stimulus 10b,	•	 model the desired student action by finding "12 is less than 15" in Stimulus 10b and <i>communicate</i> "This sentence describes the relationship between 12 and 15"; and replicate the initial presentation instructions. 		
After teacher modeling, if the student finds "12 is less than 15" in Stimulus 10b,	•	mark B for question 10 and move to question 11.		
After teacher modeling, if the student does not find "12 is less than 15" in Stimulus 10b,	•	mark C for question 10 and move to question 11.		

- *Present* Stimulus 11a and 11b.
- *Direct* the student to Stimulus 11a. *Communicate:* This is a set of 37 cubes. Ten. Twenty. Thirty. One. Two. Three. Four. Five. Six. Seven.
- *Direct* the student to each answer choice in Stimulus 11b. *Communicate* the information in each answer choice.
- Communicate: Find the number that is less than 37.



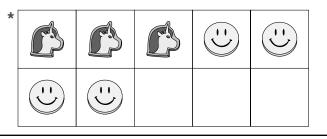
Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds "29" in Stimulus 11b,	•	mark A for question 11 and move to question 12.		
If the student does not find "29" in Stimulus 11b,		provide <i>one</i> of these allowable teacher assists to the student:		
		 Highlight the digit in the tens place in each answer choice in Stimulus 11b. OR Use place value blocks to represent each number in Stimulus 11b. OR Have the student describe what "less than" means. OR Have the student use a math chart. Replicate the initial presentation instructions. 		
After the selected teacher assistance, if the student finds "29" in Stimulus 11b,	•	mark B for question 11 and move to question 12.		
After the selected teacher assistance, if the student does not find "29" 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:* This is the number 24. There are two tens and four ones. This is the number 35. There are three tens and five ones. *Communicate* the text in Stimulus 12a.
- *Direct* the student to each answer choice in Stimulus 12b. *Communicate* the text in the stem and each answer choice.
- Communicate: Find the statement that tells why 24 is less than 35.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds "24 has one less ten" in Stimulus 12b,	•	mark A for question 12 and move to question 13.		
If the student does not find "24 has one less ten" in Stimulus 12b,	•	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds "24 has one less ten" 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 "24 has one less ten" in Stimulus 12b,	•	mark C for question 12 and move to question 13.		

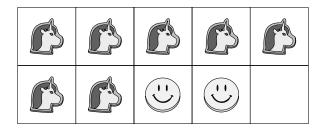
- Present Stimulus 13.
- *Direct* the student to Stimulus 13. *Communicate:* Hunter had three unicorn erasers. Then he bought four happy face erasers. Now he has seven erasers.
- Communicate: Find the seven erasers.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the seven erasers,		mark A for question 13 and move to question 14.	
If the student does not find the seven erasers,	•	 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 seven erasers,	•	mark B for question 13 and move to question 14.	
After the five-second wait time, if the student does not find the seven erasers,	•	mark C for question 13 and move to question 14.	

- *Present* Stimulus 14a and 14b.
- *Direct* the student to Stimulus 14a. *Communicate:* Sophia had seven erasers. Her friend gave her two more erasers. Now she has nine erasers.
- *Direct* the student to each answer choice in Stimulus 14b. *Communicate* the information in each answer choice.
- Communicate: Find the number sentence that shows the total number of erasers Sophia has now.

Stimulus 14a

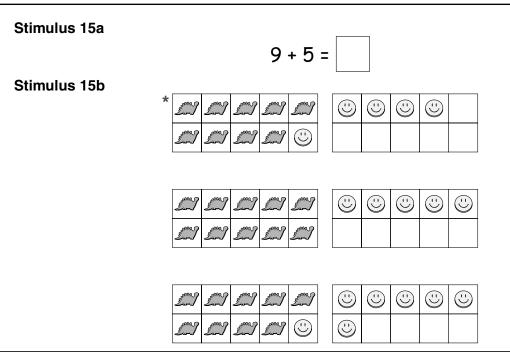


Stimulus 14b

*

Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds "7 + 2 = 9" in Stimulus 14b,		mark A for question 14 and move to question 15.	
If the student does not find "7 + 2 = 9" in Stimulus 14b,	•	 model the desired student action by finding "7 + 2 = 9" in Stimulus 14b and <i>communicate</i> "This number sentence shows the total number of erasers Sophia has now"; and replicate the initial presentation instructions. 	
After teacher modeling, if the student finds "7 + 2 = 9" in Stimulus 14b,	•	mark B for question 14 and move to question 15.	
After teacher modeling, if the student does not find " $7 + 2 = 9$ " 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:* Fernando is counting the number of erasers in his collection. Nine plus five equals a missing total.
- *Direct* the student to each answer choice in Stimulus 15b. *Communicate* the information in each answer choice.
- Communicate: Find the model that represents how many erasers Fernando has in his collection.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the model with 14 erasers in Stimulus 15b,	•	mark A for question 15 and move to question 16.		
If the student does not find the model with 14 erasers in Stimulus 15b,		provide <i>one</i> of these allowable teacher assists to the student:		
		 Have the student replicate the scenario with manipulatives. OR Label the erasers as the student counts each one. OR Have the student use a math chart or calculator. Replicate the initial presentation instructions. 		
After the selected teacher assistance, if the student finds the model with 14 erasers 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 model with 14 erasers in Stimulus 15b,	•	mark C for question 15 and move to question 16.		

- *Present* Stimulus 16a and 16b. *Communicate:* Miles and Dominique each have the same number of erasers.
- *Direct* the student to Stimulus 16a. *Communicate:* This number sentence shows nine plus seven is equal to a missing number plus eight. Both sides of the equal sign have the same value.
- *Direct* the student to each answer choice in Stimulus 16b. *Communicate* the information in each answer choice.
- Communicate: Find the missing number that makes both sides of the equal sign have the same value.

Stimulus 16a		9 + 7 = + 8		
Stimulus 16b	16	10	* 8	

Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds "8" in Stimulus 16b,	•	mark A for question 16 and move to question 17.		
If the student does not find "8" in Stimulus 16b,	•	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds "8" in Stimulus 16b,	•	mark B for question 16 and move to question 17.		
After the teacher repeats the instructions, if the student does not find "8" in Stimulus 16b,	•	mark C for question 16 and move to question 17.		

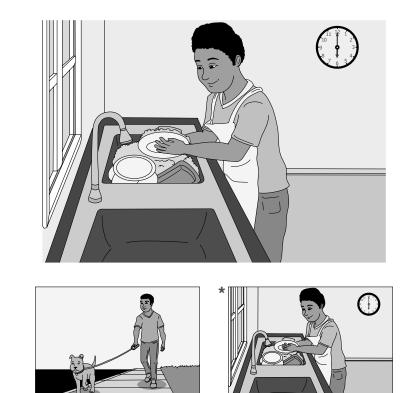
- Present Stimulus 17.
- *Direct* the student to Stimulus 17. *Communicate:* Jonah feeds his dog at 4:00 P.M., after he gets home from school.
- Communicate: Find what Jonah does after he gets home from school.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds Jonah feeding his dog,	•	mark A for question 17 and move to question 18.		
If the student does not find Jonah feeding his dog,	•	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 		
After the five-second wait time, if the student finds Jonah feeding his dog,	•	mark B for question 17 and move to question 18.		
After the five-second wait time, if the student does not find Jonah feeding his dog,	•	mark C for question 17 and move to question 18.		

- Present Stimulus 18a and 18b.
- *Direct* the student to Stimulus 18a. *Communicate:* Jonah washes the dishes at 6:00 P.M., after dinner.
- *Direct* the student to each answer choice in Stimulus 18b. *Communicate:* This is Jonah walking his dog before dinner. This is Jonah washing dishes after dinner.
- Communicate: Find what activity Jonah does at 6:00 P.M., after dinner.

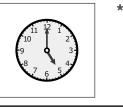
Stimulus 18a



Stimulus 18b

Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds Jonah washing dishes in Stimulus 18b,	•	mark A for question 18 and move to question 19.		
If the student does not find Jonah washing dishes in Stimulus 18b,	•	 model the desired student action by finding Jonah washing dishes in Stimulus 18b and <i>communicate</i> "This is the activity Jonah does at 6:00 P.M., after dinner"; and replicate the initial presentation instructions. 		
After teacher modeling, if the student finds Jonah washing dishes in Stimulus 18b,	•	mark B for question 18 and move to question 19.		
After teacher modeling, if the student does not find Jonah washing dishes in Stimulus 18b,	•	mark C for question 18 and move to question 19.		

- Present Stimulus 19. Communicate: Jonah starts his homework at 7:00 P.M.
- Direct the student to Stimulus 19. Communicate: Here are three clocks.
- Communicate: Find the clock that shows what time Jonah starts his homework.

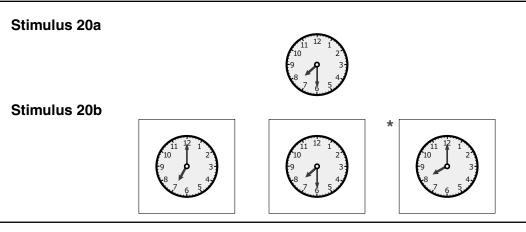






Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the clock that shows 7:00,	•	mark A for question 19 and move to question 20.	
		provide <i>one</i> of these allowable teacher assists to the student:	
If the student does not find the clock that shows 7:00,	•	 Highlight the hour hand on each clock. OR Have the student replicate the answer choices with an analog clock. 	
		Replicate the initial presentation instructions.	
After the selected teacher assistance, if the student finds the clock that shows 7:00,	•	mark B for question 19 and move to question 20.	
After the selected teacher assistance, if the student does not find the clock that shows 7:00,	•	mark C for question 19 and move to question 20.	

- *Present* Stimulus 20a and 20b.
- *Direct* the student to Stimulus 20a. *Communicate:* Jonah starts watching a show at 7:30 р.м. It takes him 30 minutes, or a half hour, to watch the show.
- Direct the student to each answer choice in Stimulus 20b. Communicate the time on each clock.
- Communicate: Find the clock that shows the time when Jonah finishes watching the show.



Scoring Instructions				
Student Action		Test Administrator Action		
If the student finds the clock showing 8:00 in Stimulus 20b,	•	mark A for question 20.		
If the student does not find the clock showing 8:00 in Stimulus 20b,	•	replicate the initial presentation instructions.		
After the teacher repeats the instructions, if the student finds the clock showing 8:00 in Stimulus 20b,	•	mark B for question 20.		
After the teacher repeats the instructions, if the student does not find the clock showing 8:00 in Stimulus 20b,	•	mark C for question 20.		

TEST INSTRUCTIONS

STAAR ALTERNATE 2 GRADE 4 Mathematics April 2023