TEST ADMINISTRATOR MANUAL

GRADE 7
Mathematics
STAAR Alternate 2

Administered April 2016

RELEASED

Texas Essential Knowledge and Skills (TEKS) Curriculum Assessed

Grade 7 Mathematics	Cluster 1
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 7.9	The student applies mathematical process standards to solve geometric problems.
Essence Statement	Solves problems involving circumference, area, or volume of two- or three-dimensional geometric figures.
Item 1 Prerequisite Skill	identify two-dimensional components of three-dimensional objects (K)
Item 2 Prerequisite Skill	identify two-dimensional components of three-dimensional objects (K)
Item 3 Prerequisite Skill	classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language (2)
Item 4 Prerequisite Skill	classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language (2)

Grade 7 Mathematics	Cluster 2
Reporting Category 2	

Grade 7 Mathematics	Cluster 3
Reporting Category 1	Probability and Numerical Representations: The student will demonstrate an understanding of how to represent probabilities and numbers.
Knowledge and Skills Statement 7.6	The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships.
Essence Statement	Uses probability to solve problems involving proportional relationships.
Item 9 Prerequisite Skill	use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole (2)
Item 10 Prerequisite Skill	use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole (2)
Item 11 Prerequisite Skill	compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models (3)
Item 12 Prerequisite Skill	represent ratios and percents with concrete models, fractions, and decimals (6)

Grade 7 Mathematics	Cluster 4
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 7.6	The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships.
Essence Statement	Solves problems using data represented in graphs.
Item 13 Prerequisite Skill	use data to create picture and bar-type graphs (1)
Item 14 Prerequisite Skill	draw conclusions and generate and answer questions using information from picture and bar-type graphs (1)
Item 15 Prerequisite Skill	draw conclusions and make predictions from information in a graph (2)
Item 16 Prerequisite Skill	draw conclusions and make predictions from information in a graph (2)

Grade 7 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 7.3	The student applies mathematical process standards to add, subtract, multiply, and divide while solving problems and justifying solutions.
Essence Statement	Finds solutions to addition, subtraction, multiplication, or division problems.
Item 17 Prerequisite Skill	use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as 2 + 4 = [ ]; 3 + [ ] = 7; and 5 = [ ] – 3 (1)
Item 18 Prerequisite Skill	use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as 2 + 4 = [ ]; 3 + [ ] = 7; and 5 = [ ] – 3 (1)
Item 19 Prerequisite Skill	model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined (2)
Item 20 Prerequisite Skill	determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10 (3)

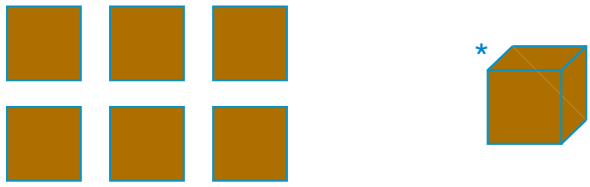
Additional resources for STAAR Alternate 2, including the STAAR Alternate 2 Test Administrator Manual and the STAAR Alternate 2 Educator Guide, are available online: http://tea.texas.gov/student.assessment/special-ed/staaralt/

MATHEMATICS

Presentation Instructions for Question 1

- *Present S* 1.
- *Direct* a . *Communicate:* **A student has six squares made out of paper.**
- *Direct* . *Communicate:* **The student made a cube using the six squares.**
- *Communicate:* **Find the cube.**

Stimulus 1



Scoring Instructions		
Student Action		**Test Administrator Action**
I ,	➡	a **A** 1 a 2.
I ,	➡	; a a a a a .
A - a ,	➡	a **B** 1 a 2.
A - a , ,	➡	a **C** 1 a 2.

Presentation Instructions for Question 2

- *Present* S 2a a 2 .
- *Direct* S 2a. *Communicate:* **A student made this box using rectangles.**
- *Direct* a a S 2 .
- *Communicate:* **Find a figure that was used to make the box.**

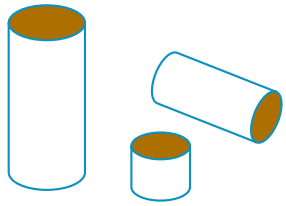
Stimulus 2a

Stimulus 2b

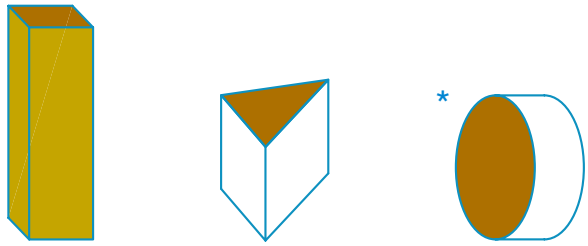
Presentation Instructions for Question 3

- *Present* S , 3a a ˥ 3 .
- *Direct* ˥ ☒ S , 3a. *Communicate:* **A student was sorting geometric figures in math class. The student made this group because the figures have bases that are the same shape.**
- *Direct* ˥ ☒ a a˥ ☒ ˥S , 3 .
- *Communicate:* **Find the geometric figure that belongs in the group the student made.**

Stimulus 3a



Stimulus 3b



Presentation Instructions for Question 4

- *Present* S 4a a 4 .
- *Direct*

Presentation Instructions for Question 5

- *Present* S 5.
- *Direct* 100. *Communicate:* **This is the number 100. This is 100 dots.**
- *Direct* 10 . *Communicate:* **This is the number 10. This is 10 dots. 100 divided by 10 is 10.**
- *Direct* 10 . *Communicate:* **This is the number 10. This is 10 dots.**
- *Direct* 1. *Communicate:* **This is the number 1. This is 1 dot. 10 divided by 10 is 1.**
- *Direct* a a . *Communicate:* **This table shows numbers that get smaller by dividing by 10.**
- *Communicate:* **Find the table that shows numbers that get smaller by dividing by 10.**

Stimulus 5

Presentation Instructions for Question 6

- *Present* S 6a a 6 .
- *Direct* S 6a. *Communicate:* **These are two rows of a table that shows a pattern that gets smaller because each number in the first column is divided by 10.**
- *Direct* S 6a. *Communicate:* **200 ÷ 10 is 20. 20 ÷ 10 is 2.**
- *Direct* a a S 6 . *Communicate* a a .
- *Communicate:* **Find the table that shows a pattern that gets smaller because each number in the first column is divided by 10.**

Stimulus 6a

00 →	0
0 →	

Stimulus 6b

*

6 00 →	6 0
6 0 →	6

00 →	0
0 →	

Scoring Instructions

Student Action		Test Administrator Action
I a 600, 60 a 60, 6,	➡	a **A** 6 a 7.
I 600, 60 a 60, 6,	➡	a a 600, 60, a 60, 6 a *communicate* **"The table with 600, 60 and 60, 6 shows a pattern that gets smaller because each number in the first column is divided by 10"**; a a a .
A a a 600, 60 a 60, 6,	➡	a **B** 6 a 7.
A a a 600, 60 a 60, 6,	➡	a **C** 6 a 7.

Scoring Instructions		
Student Action		**Test Administrator Action**
I [illegible] 6a 3 S 7,	➡	a **A** [illegible] 7a [illegible] 8.
I [illegible] 6 a 3 S 7,	➡	[illegible] **one** [illegible] a [illegible] a a a [illegible] ! . Ha [illegible] . **OR** . P [illegible] a [illegible] 40 5 = 8. **OR** . A [illegible] a a a [illegible]. **OR** . Ha [illegible] a a a . R a a [illegible] .
A a a a, [illegible] 6a 3 S 7,	➡	a **B** [illegible] 7a [illegible] 8.
A a a a, [illegible] 6a 3 S 7,	➡	a **C** [illegible] 7a [illegible] 8.

Presentation Instructions for Question 8

- *Present* S ´ 8a a ⁿ 8 . *Communicate:*

Presentation Instructions for Question 9

- *Present* S 9.
- *Direct* S 9. *Communicate:* **A student keeps pencils in his backpack.**
- *Direct* a a *Communicate:*

Presentation Instructions for Question 12

- *Present* S 12a a 12 .
- *Direct* a S 12a. *Communicate:* **Students in two classes are trying to win a prize. Only one student from each class will be chosen to win a prize.**

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- *Direct* a S 12 .
- *Communicate:* **Find the pair of students who have a chance of winning a prize.**

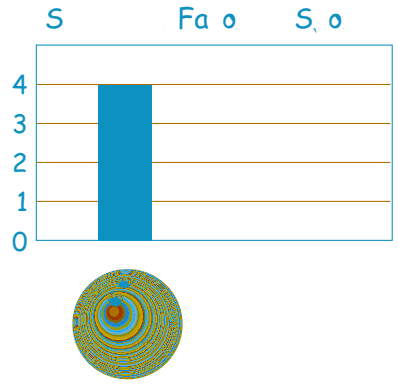
Stimulus 12a

Scoring Instructions		
Student Action		**Test Administrator Action**
I [illegible] a [illegible] S [illegible] D[illegible] [illegible] S [illegible] 12 ,	➡	a [illegible] **A** [illegible] [illegible] 12 a [illegible] [illegible] [illegible] 13.
I [illegible] [illegible] [illegible] a [illegible] S a [illegible] D[illegible] [illegible] S [illegible] 12 ,	➡	[illegible] a [illegible] [illegible] a [illegible] [illegible] [illegible] .
A [illegible] a [illegible] [illegible] [illegible] [illegible] a [illegible] S a [illegible] D[illegible] [illegible] S [illegible] 12 ,	➡	a [illegible] **B** [illegible] [illegible] 12 a [illegible] [illegible] [illegible] 13.
A [illegible] a [illegible] [illegible] [illegible] [illegible] [illegible] a [illegible] S a [illegible] D[illegible] [illegible] S [illegible] 12 ,	➡	a [illegible] **C** [illegible] [illegible] 12 a [illegible] [illegible] [illegible] 13.

Presentation Instructions for Question 13

- *Present* S 13.
- *Direct* S 13. *Communicate:* **This bar graph shows students' favorite sports.**
- *Direct* *x*-a . *Communicate:* **Bowling. Basketball.**
- *Direct* *y*-a . *Communicate:* **0. 1. 2. 3. 4.**
- *Direct* a 0 4. *Communicate:* **Four students picked bowling as their favorite sport.**
- *Communicate:* **Find bowling on the bar graph.**

Stimulus 13



Presentation Instructions for Question 14

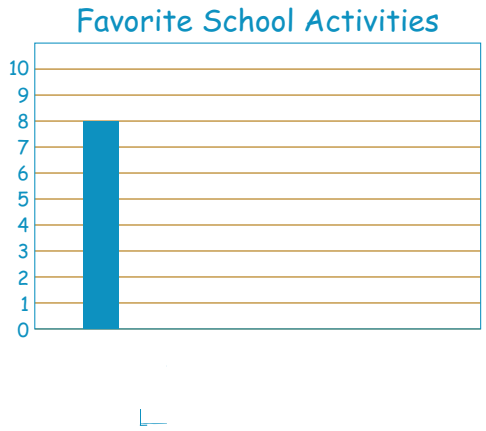
- *Present* S ´ 14a a n 14 .
-

Scoring Instructions		
Student Action		**Test Administrator Action**
I [illegible] a [illegible] a [illegible] S [illegible] 14a,	➡	a [illegible] **A** [illegible] [illegible] 14 a [illegible] [illegible] [illegible] 15.
I [illegible] [illegible] [illegible] a [illegible] a [illegible] a [illegible] S [illegible] 14a,	➡	[illegible] a [illegible] [illegible] a [illegible] a [illegible] S [illegible] 14a a [illegible] *communicate* **“This is the bar where the data for the new student who picked basketball would be added”**; a [illegible] [illegible] a [illegible] a [illegible] [illegible] [illegible] [illegible] [illegible] .
A a [illegible] a [illegible] a [illegible] S [illegible] 14a,	➡	a [illegible] **B** [illegible] [illegible] 14 a [illegible] [illegible] [illegible] 15.
A a [illegible] [illegible] a [illegible] a [illegible] S [illegible] 14a,	➡	a [illegible] **C** [illegible] [illegible] 14 a [illegible] [illegible] [illegible] 15.

Presentation Instructions for Question 15

- *Present* S 15a a 15 .
- *Direct* S 15a. *Communicate:* **This bar graph shows the number of students who picked their favorite school activity.**
- *Direct* a a a *Communicate:* **Field trip. School play. Pep rally.**
- *Direct* a a S 15 .
- *Communicate:* **Find the number of students who picked the pep rally as their favorite school activity.**

Stimulus 15a

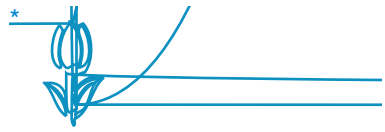


Presentation Instructions for Question 16

Presentation Instructions for Question 17

- *Present* S 17.
- *Direct* S 17. *Communicate:* **There are two rows of flowers in a garden.**
- *Direct* . *Communicate:* **There are four flowers in this row. One, two, three, four.**
- *Direct* . *Communicate:* **There are four flowers in this row. One, two, three, four.**
- *Direct* . *Communicate:* **This model can be used to show that 4 + 4 equals 8.**
- *Communicate:* **Find the model that can be used to show that 4 + 4 equals 8.**

Stimulus 17



Presentation Instructions for Question 18

- *Present* S 18a a 18 .
- *Direct* a S 18a. *Communicate:* **One, two, three, four, five, six. One, two, three, four, five, six. There are two rows of flowers in a garden. There are six flowers in each row.**
- *Communicate:* **This model can be used to show that 6 + 6 equals 12.**
- *Direct* a a S 18 .
- *Communicate:* **Find the model that can also be used to show that 6 + 6 equals 12.**

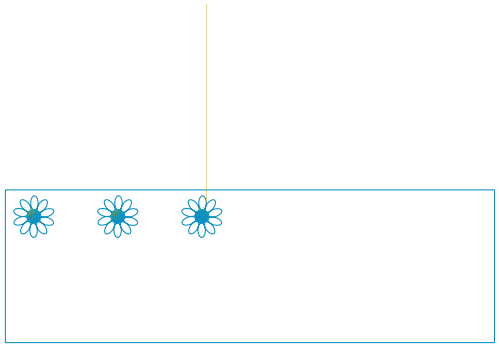
Stimulus 18a

Scoring Instructions		
Student Action		**Test Administrator Action**
I 12 ,	➡	a **A** 18 a 19.
I 12 a 12 *communicate* **“This model can be used to show that 6 + 6 equals 12”**; a	➡	a 12 a a a .
A a 12 ,	➡	a **B** 18 a 19.
A a , 12 ,	➡	a **C** 18 a 19.

Presentation Instructions for Question 19

- *Present* S 19.
- *Direct* a . *Communicate:* **These models show different numbers of flowers.**
- *Communicate:* **Find the model that shows 3 × 4 equals 12.**

Stimulus 19



Presentation Instructions for Question 20

- *Present* S 20a a 20 .
- *Direct* S 20a. *Communicate:* **The same number of trees is in each row of trees at a park. This is one of the rows. The park has four rows of trees.**
- *Direct* a a S 20 . *Communicate* a a .
- *Communicate:* **Find the number of trees in the four rows.**

Stimulus 20a

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