Grade 6 / Scored Student Samples ITEM #2

SMARTER BALANCED PERFORMANCE TASK

Focus Standards and Claim

Claim 4

4.OA.C.5

Stimulus

Picking a Pet

Your class is trying to decide what type of animal to get for the class pet. Your teacher is letting the class vote to choose a goldfish, a turtle, or a hamster as the class pet.

All 20 students in your class voted for both their 1st choice and their 2nd choice for the class pet. The results are shown in Table 1.

Table 1. Class Pet Votes

Student	1st Choice	2nd Choice	Student	1st Choice	2nd Choice
1	Turtle	Hamster	**11**	Turtle	Hamster
2	Goldfish	Hamster	**12**	Turtle	Goldfish
3	Goldfish	Turtle	**13**	Hamster	Turtle
4	Hamster	Turtle	**14**	Hamster	Goldfish
5	Goldfish	Turtle	**15**	Turtle	Goldfish
6	Turtle	Goldfish	**16**	Goldfish	Turtle
7	Hamster	Goldfish	**17**	Turtle	Goldfish
8	Turtle	Goldfish	**18**	Turtle	Goldfish
9	Goldfish	Hamster	**19**	Turtle	Hamster
10	Goldfish	Hamster	**20**	Goldfish	Hamster

Item Prompt

Create your own method for using the votes to decide a winner. Explain your method using the information from **Table 1** to determine the winning pet.

Understanding Proficiency A Partnership of WestEd and SCALE

Scoring Guide

SCORE	2 POINTS	1 POINT	0 POINTS
	Student clearly describes his/her selected method for using votes to decide a winner AND explains which pet is the winner based on this method. **Note:** As long as students use their calculations correctly from Item 1 to answer Item 2, full credit should be granted.	Student describes which pet won, but does not support his/her answer with a method, OR student clearly describes a method for using the given information to determine the winning pet, but then does not use his/her method to determine which pet won.	Student just states a winning pet without explanation.

Sample Responses

Student Sample A

2 POINTS

My method is to have the first votes be worth 2 points, and the second choice of votes be worth 1 point. Whenever animal has the most points wins. The winning pet would be the turtle using my method because it has the most points.

Goldfish 14 + 8 = 22

Hamster 8 + 7 = 15

Turtle 18 + 5 = 28

SCORE RATIONALE

The student clearly described a method and explained which pet would be the winner based on this method. The method is to assign two points to each student's first vote. The student accurately applied the method to the data, and added the total points to identify the turtle as the winner. The response clearly communicates an understanding of the task, uses the provided data accurately, and presents a sensible model to determine and justify the winning pet. The response earns full credit.

Student Sample B

2 POINTS

My method to determine a winner would be to add the votes up for each animal, then seeing which animal was voted for the most. After the calculation, I would determine that turtles won.

G = 7 + 8 = 15

H = 4 + 6 = 10

T = 9 + 9 =18

SCORE RATIONALE

The student clearly described a method and explained which pet is the winner based on this method. This student's method was to add the 1st and 2nd choice votes together to determine the winner, the pet with the greatest total votes. Although the response uses incorrect values for some of the votes, these came from incorrect totals in Item 1. These incorrect totals were applied correctly in this item, therefore, the student is not penalized for a follow-through error made in a previous item. This response clearly communicates an understanding of the context with a mathematical model and an interpretation of the results in context. The response earns 2 points.

Student Sample C

2 POINTS

The turtle is the winner because the turtle beat the goldfish by 1 and beat the hamster by 4. I added all first and second votes together for each animal.

Goldfish = 7 + 8 = 13

Hamster = 4 + 7 = 11

Turtle = 9 + 5 =14

SCORE RATIONALE

The student clearly described a method and explained which pet is the winner based on the method. This student's method was to add the 1st and 2nd choice votes together to determine the winner, the pet with the greatest total. This response provides clear evidence of understanding the context, a mathematical model and an interpretation of the results in context, despite a minor calculation error within the response. Although the student inaccurately added the votes for the goldfish, he/she accurately determined the turtle to be the winner using the described method. This response contains evidence of the student's competence in problem solving and modeling to the full extent expected by this item.

Student Sample D

1 POINT

So you add each number of vote from 1st choice votes + 2nd choice votes. You will get the winner.

SCORE RATIONALE

The student clearly described a method but did not explain which pet is the winner based on this method. This student's method was to add the 1st and 2nd choice votes together to determine the winner. This response demonstrates a partial use of the mathematical practices essential to this item and earns partial credit.

Student Sample E

1 POINT

Goldfish 14 + 7 = 21

Hamster 8 + 7 = 15

Turtle 9 + 5 = 14

SCORE RATIONALE

This response provides calculations that show a method but not an explanation of which pet is the winner based on this method. The response suggests a method of adding the 1st and 2nd choice votes together to determine the winner. Although the response uses incorrect values for some of the votes, these are follow-through errors from incorrect totals in Item 1; these incorrect totals were applied correctly in this item, therefore, the response is not penalized for an error made in a previous item. However, while the calculations show a method, there is no explicit explanation of the method or the winner. This response demonstrates a partial use of the mathematical practices essential to this item and earns partial credit.

Student Sample F

1 POINT

The goldfish won because it had the most votes.

SCORE RATIONALE

The student described which pet won but gave a partial explanation to support this answer. While it is true that the goldfish had the most total votes, there is no clear explanation that the method used was to add the 1st and 2nd choice votes to determine the winner. The student interpreted results in context to determine a winner, but the response only includes part of a method for interpreting the data. The response earns partial credit of 1 point.

Student Sample G

1 POINT

Well to decide a winner I first made a chart of all the students first and second choices. The turtle won from a score of 9 votes.

SCORE RATIONALE

The student clearly stated a winner but did not include a description of the method used to determine the winner. Although it is true that the turtle got the most (9) votes in the first round, the response does not include a clear explanation that the method used to determine the winner was to only consider the 1st choice votes. The student interpreted results in context to determine a winner, but did not describe a mathematical model or a method to interpret the data. This response earns partial credit of 1 point.

Student Sample H

0 POINTS

I believe that the hamster won since two and four are both factors of 20.

20/40 / 10 = 2/4

I have shown that they both equal to 20. I made a table and simplify 20 over 40.

SCORE RATIONALE

The response suggests the student may not have understood the situation. This response is associated with the task as the student indicates which pet won, but it does not provide a clear method for determining a winner. It is hard to understand how the stated method is related to the data or the situation. The response earns 0 points.

Student Sample I

0 POINTS

1st choice:

Goldfish – 7

Turtle – 9

Hamster – 4

2nd choice:

Goldfish – 7

Tutle – 9

Hamster – 7

SCORE RATIONALE

The student demonstrated some understanding of the situation. This response is associated with the task as the student recreated the data table used in item 1 in a new format. However, the response does not include any description of a method or indicate which pet won using a method. The response earns 0 points.