Focus Standards and Claim

Claim 3
2.OA.A.1

Stimulus

**Going Green**

The “Go Green” company held a week-long recycling contest at your school. The grade that collects the most bottles and cans wins the contest.

Your task is to determine which grade won the “Go Green” contest.

The items that can be recycled are shown.

- Plastic bottles
- Aluminum cans
- Glass bottles

Students from the 3rd grade, 4th grade, and 5th grade classes collected bottles and cans and brought them to school.

Table 1 shows how many bottles and cans each grade collected on each day of the week.

**Table 1. Bottles and Cans Collected**

<table>
<thead>
<tr>
<th>Class</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Grade</td>
<td>50</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>90</td>
</tr>
<tr>
<td>4th Grade</td>
<td>70</td>
<td>90</td>
<td>100</td>
<td>50</td>
<td>80</td>
</tr>
<tr>
<td>5th Grade</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>
Item Prompt

Use your answers from questions 3 and 4 to explain how the 2nd grade class could have won the “Go Green” contest.

Scoring Guide

<table>
<thead>
<tr>
<th>SCORE</th>
<th>2 POINTS</th>
<th>1 POINT</th>
<th>0 POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The student takes the value from Question 4 and states that it is more than the winning number from Question 3 (e.g., 410).&lt;br&gt;&lt;br&gt;<strong>NOTE:</strong> For full credit the student cannot just give a number (e.g., 800) and state, “it is more”. We are looking for a logical statement that explicitly makes use of the information.</td>
<td>The student states the information but does not fully make the logical connections.</td>
<td>All other responses</td>
</tr>
</tbody>
</table>

Sample Responses

Student Sample A

2nd grard got 490 and it’s grater then 400, 390, and 420 so 2nd grade won

**SCORE RATIONALE**

This student used the sum of the values from Question 4 and compared the amount to all the grade level totals in Question 3, clearly stating how Grade 2 won. This response shows evidence of the student’s ability to interpret the context of the problem, retrieve needed information from prior problems, state a claim, and clearly communicate a chain of reasoning to justify the claim.
Student Sample B

200+350+110=660

2nd grade won because they had a bigger total than 3rd grade (420) 4th grade (390) and 5th grade (460)

**SCORE RATIONALE**
This student showed the computation to find the sum of the values from Question 4, clearly stated that Grade 2 won, and explicitly compared the totals for each of the grade levels to justify this statement. This response shows evidence of the student’s ability to interpret the context of the problem, retrieve needed information from prior problems, state a claim, and clearly communicate a chain of reasoning to justify the claim.

Student Sample C

2nd grade won they had more than the other grades

**SCORE RATIONALE**
This student stated an accurate claim, compared grade level totals generally, but did not support the claim with specific evidence. This response shows evidence of the student’s ability to interpret the context of the problem, retrieve needed information from prior problems, and state a claim. This response does not show sufficient evidence of a clear chain of reasoning with explicit use of information to support the conjecture, and earns partial credit of 1 point.
Student Sample D

2\textsuperscript{nd} grade should've won because they got 4 milioon and three

**SCORE RATIONALE**
This student stated an accurate claim based on the sum of the values from Question 4, but did not include a statement to justify the claim by comparing the total for Grade 2 to the greatest total value from Question 3. This response shows partial evidence of the student's ability to interpret the context of the problem and state a claim. The response does not show sufficient evidence of retrieving all of the needed information from prior problems or providing explicit information in a clear chain of reasoning to support the claim. 1 point.

Student Sample E

2nd grade could have won because I put 200 + 110 + 110. We all know what is 200 + 110 + 110. It equals 420.

**SCORE RATIONALE**
This student stated an accurate claim but did not support the claim by comparing the total for Grade 2 to the greatest total value from Question 3. This response shows evidence of the student's ability to interpret the context of the problem and state a claim. The response does not show sufficient evidence of retrieving all of the needed information from prior problems or providing explicit information in a clear chain of reasoning to support the claim. 1 point.
Student Sample F

0 POINTS
Thay could of won if thay had 500, 410, 20.

SCORE RATIONALE
This student restated the values provided for Question 4 and did not compare the total for Grade 2 to the greatest total from Question 3. The response shows partial evidence of understanding the requirements of the question, and insufficient evidence of the student’s ability to state a precise claim and provide an explicit chain of reasoning to justify a claim. 0 points.

Student Sample G

0 POINTS
290 + 401 = 691
2nd grade would had have 691

SCORE RATIONALE
This student did not successfully address the question. The student added together two sums from Question 3 to get 691, did not state that the 2nd graders won, and did not explain how they won. The response suggests that the student may not have understood the requirements of the question, though there is some evidence of mathematical reasoning about the relevant values. 0 points.