

Focus
Standards
and Claim

Claim 4
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

Class	Bottles and Cans Collected Each Day				
	Monday	Tuesday	Wednesday	Thursday	Friday
3rd Grade	50	60	90	120	90
4th Grade	70	90	100	50	80
5th Grade	80	80	80	80	80

Item Prompt

The 2nd grade class got excited about the “Go Green” contest and wanted to join in. They started collecting bottles and cans on Wednesday, even though they missed the first two days.

Complete the table to show a way for the 2nd grade class to still win the contest.

	Wednesday	Thursday	Friday
2nd Grade	<input type="text"/>	<input type="text"/>	<input type="text"/>

Scoring Guide

SCORE	1 POINT	0 POINTS
	<p>The student enters any numbers in the three days that add up to more than 410 (the total from 3rd grade for the week).</p> <p>NOTE: Do not grade on “reasonableness”, i.e., answers like 1,000,000 are allowed.</p>	All other responses.

Sample Responses

Student Sample A



	Wednesday	Thursday	Friday
2nd Grade	300	100	90

SCORE RATIONALE

This student entered values with a sum greater than 410, as required. The response shows evidence of successfully interpreting the context, retrieving needed information from a prior problem, and inventing a set of values that satisfy given constraints.

Student Sample B



	Wednesday	Thursday	Friday
2nd Grade	200	350	110

SCORE RATIONALE

This student entered values with a sum greater than 410, as required. The response shows evidence of successfully interpreting the context, retrieving needed information from a prior problem, and inventing a set of values that satisfy given constraints.

Student Sample C



	Wednesday	Thursday	Friday
2nd Grade	4000003	2	1

SCORE RATIONALE

Although the sum of the values in this response is 4,000,003, the response receives full credit because the total is greater than 410. This response shows evidence of the student's ability to interpret the mathematics of the problem and create a set of values that satisfy given constraints, but shows unclear evidence of successfully interpreting the meaning of the values in context. Still, the response fulfills the requirement for full credit.

Student Sample D



	Wednesday	Thursday	Friday
2nd Grade	3	4	5

SCORE RATIONALE

This student appears to have filled in grade levels rather than values. This response does not show evidence of successfully interpreting the context or the mathematics of the problem.

Student Sample E



	Wednesday	Thursday	Friday
2nd Grade	90	200	2

SCORE RATIONALE

This student entered values with a sum that is less than 410. The response does not show evidence of correctly interpreting the problem, or creating values that satisfy the given constraints.