

Rubric – Girl Scout Boys and Girls

Solution

- a. The 6th graders liked Thin Mints the best. Seven 6th graders (5 boys + 2 girls) liked Samoas the best; eight 6th graders (4 boys + 4 girls) liked Tagalongs the best; thirteen 6th graders (5 boys + 8 girls) liked Thin Mints the best.
- b. Using the totals provided in part (a) for the 6th graders, the least popular type of cookie is Samoas.
- c. The choices of the boys are more variable. The girls have a clear first choice; 8/14 or about 57% of the 6th grade girls prefer Thin Mints. Only 4 out of 14 girls (about 29%) prefer Tagalongs and 2 out of 14 girls (about 14%) prefer Somoas. There is more variability for the boys, with Thins Mints (5/14) and Somoas (5/14) tied for the top choice.

Scoring

Each part is scored as Essentially Correct (E), Partially Correct (P), or Incorrect (I).

Part (a) is scored Essentially Correct (E), Partially Correct (P), or Incorrect.

Essentially correct if Thin Mints are identified as the top choice and an appropriate justification is provided (an explicit reference to the combined results).

Partially correct if the top choice is identified for each gender OR a weak justification is provided.

Part (b) is scored Essentially Correct (E), Partially Correct (P), or Incorrect.

Essentially correct if Samoas are identified and an appropriate justification is provided (an explicit reference to the combined results).

Partially correct if the third choice is identified for each gender OR a weak justification is provided.

Note: The justification may be provided in part (a), which is OK. The students do not have to repeat their work in part (b).

Note: Because part (a) and part (b) are similar, students should not be penalized for the same minor mistake made in both (e.g, averaging frequencies, mistaking units, arithmetic errors that lead to incorrect decisions).

Part (c) is scored Essentially Correct (E), Partially Correct (P), or Incorrect.

Essentially correct if the response identifies the boys' choices as more variable (or the girls' choices as less variable) with appropriate justification that explicitly compares the variability for boys and girls.

Partially correct if the response identifies the boys' choices as more variable (or the girls' choices as less variable) with weak justification.

Note: An answer with no justification (e.g., Thin Mints, Samoas, or Boys) or responses that just repeat statements in the stem are scored incorrect.

4 Complete Response

All three parts essentially correct

3 Substantial Response

Two parts essentially correct and one part partially correct

2 Developing Response

Two parts essentially correct and one part incorrect

OR

One part essentially correct and one or two parts partially correct

OR

Three parts partially correct

1 Minimal Response

One part essentially correct and two parts incorrect

OR

Two parts partially correct and one part incorrect