

PIZZA PARTY

Performance Standard 10B.C

Create and administer a class survey and follow-up survey to determine what kind of pizzas and beverages to order for a class pizza party accordingly:

- *Mathematical knowledge*: create and administer a survey and follow-up survey that will produce reliable and valid results,
- *Strategic knowledge*: use appropriate strategies for formulating questions, data collection and reporting findings, and
- *Explanation*: explain completely and clearly what was done and why it was done.

Procedures

1. ***In order to formulate questions, design data collection methods, gather and analyze data and communicate findings(10B)***, students should experience sufficient learning opportunities to develop the following:
 - Create and administer a survey that answers real life questions considering how many and what kind of questions will be asked and how the answers will be recorded.
 - Propose a follow-up survey to investigate questions that arise from the initial survey.
2. Have students review and discuss the task to be completed and how the rubric will be used to evaluate it.
3. Tell students that the class will be having a pizza party and that they can order no more than 4 pizzas for the party and one can of soda for each student. Ask students to conduct a survey of the class to ensure that they order enough of the class's favorite pizzas and beverages. Students will have to conduct the following steps:
 - Part A: Design the survey to answer the following: What are the four favorite types of pizzas enjoyed by students in this class? Students will have to develop survey questions that will help them determine the favorite kinds of pizzas and beverages but also the right amounts of each kind. In designing their survey, they will be trying to get data to determine such things as number of pieces in a pizza, how many pieces of each kind of pizza that each student will eat, whether there is a limit to the number of pieces a student may eat, and the number of choices of beverages.
 - Part B: After survey is designed, have students complete the survey and tabulate the results.
 - Part C: Ask students to make two graphs (i.e., one for pizzas and one for beverages) showing the results of the survey.
 - Part D: Have the students conduct a brief follow-up survey (e.g., to narrow down the choices of pizzas or beverages).
 - Part E: Direct students to write a complete explanation of how and why they wrote survey questions, how and why they designed the reporting graphs, and how and why they chose questions for the follow-up survey.
 - Part F: Ask students to discuss all of the results with a math partner.
4. Evaluate students' work using the rubric as follows and use the scoring guide on the rubric to determine the performance level:
 - 4 = survey questions were appropriate; survey was conducted and data recorded correctly; explanation/justification was complete.
 - 3 = survey questions and recording of data had minor errors, but not in both; survey was conducted and data recorded and graphed correctly with only minor errors; explanation/justification was nearly complete.
 - 2 = survey questions, recording of data, and graphs had minor errors; some of the strategies were inappropriate; explanation or justification was adequate, but not both.
 - 1 = all components had major errors.
 - 0 = task not attempted.

Examples of Student Work not available

Resources

- Mathematics Rubric

Time Requirements

- One class period to create and conduct survey
- One class period to tabulate results and create graph
- One class period to write explanation and share the results

NAME _____ DATE _____

Pizza Party

Your job is to find out what type of pizza and beverage are liked by the students in our class. Write questions to find out:

What are the four favorite pizzas?

What are the four favorite beverages?

Conduct your survey and record the results on graphs.

You will use this information to order pizza and drinks for a class pizza party. You will need to keep several things in mind.

How big are the pizzas you want to order?

How many slices will each pizza have?

What size are the drinks and how many servings are in each?

Are there any other questions that you need to ask your classmates? Why?

Write these questions, conduct a follow up survey and record the results.

Write the order for the pizzas and drinks and tell why you are ordering these amounts.