

Mathematics CFA Template

Pre-Instruction

1. List the Standard. Underline the nouns (what students will know) and highlight the verbs (what student will do):
 2.MD.10--Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

2. Mathematical Practices

- #1- Make sense of problems and persevere in solving them.
 #4- Model with mathematics.
 #5- Use appropriate tools strategically.

3. I Can Statements – Put learning targets in student friendly terms.

- I can draw a picture graph to represent data.
 I can draw a bar graph to represent data.
 I can solve problems by analyzing a bar graph or picture graph.

Depth of Knowledge of the standard (Highlight the Level of the Learning Target):

Level 1 Recall; Level 2 – Skill/Concept; Level 3 – Strategic Thinking; Level 4 – Extended Thinking

4. List the skills students need to know in order to begin this standard:

- Students must know the difference in a picture graph and bar graph.
 Students must know how to solve simple addition and subtraction problems.
 Students must know vocabulary such as: representation, data, picture graph, bar graph, key, and categories.

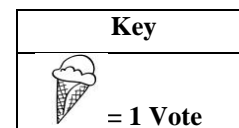
5. What type of assessment am I going to write? [selected response (m/c, t/f, y/n, matching, fill in ___) or constructed response (**short:** word, phrase, sentence, single problem; **extended:** multi-step operations in math, problem solving)] List the assessment questions.

Mrs. French and Mr. Miskey are planning a party for their classes. The students are asked to vote for their favorite ice cream flavor. The list below are the results.

Chocolate- 8 Vanilla- 7 Chocolate Chip- 13 Cookie Dough- 8 Strawberry- 5

Use the information from the list to complete the pictograph below and answer the questions.

Flavor	Number of Votes
Chocolate	
Vanilla	
Chocolate Chip	
Cookie Dough	
Strawberry	



1. What two flavors did the students like the least? _____ and _____
2. How many more students voted for chocolate chip than vanilla? _____
3. How many voted for strawberry and cookie dough together? _____

6. Scoring Guide

- Exceeds Expectations:** Students use the pictograph to also construct a bar graph and answer all three questions correctly.
Proficient: Students represent the pictograph correctly and answer all three questions correctly.
Approaching Proficiency: Students missed one question or misrepresented the graph on two or less categories.
Not Proficient: Students misinterpreted the graph completely and answered questions incorrectly.

Name: _____

2.MD.10 Constructed Response


Directions: Use the information provided to complete the chart and answer the following questions.

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Flavor	Number of Votes
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Key
 = 1 Vote

1. What two flavors did the students like the least? _____ and _____

2. How many more students voted for chocolate chip than vanilla? _____

3. How many voted for strawberry and cookie dough together? _____

