

## [Illustrative Mathematics](#)

### 1.MD Favorite Ice Cream Flavor

#### [Alignment 1: 1.MD.C.4](#)

#### Materials:

- Pocket chart
- Sentence strip
- Square pieces of paper for each student
- Popsicle sticks

#### Setup:

Write a question that has three choices as an answer on a sentence strip. For example,

*"Which flavor of ice cream do you like best?"*

Put the three categories on the bottom of the pocket chart. For example,

*Chocolate Vanilla Strawberry*

Write interpretation questions on the popsicle sticks. For example,

- "How many students answered this question?"
- "Which has the most?"
- "Which has the fewest?"
- "Are any the same?"
- "How many are in each category?"

#### Actions:

Begin with all students sitting together in the meeting area. Read the question aloud to the students, and ask individual students to answer the question by putting a paper square above their answer. Ensure that as each child answers, they put their paper above the previous square, not to the side of the square. When each child has answered, you will have a bar graph with three categories.

Draw a popsicle stick and model answering the question to the whole group. Divide students into five groups and have each group pick a popsicle stick. Students then read the question on the popsicle stick, discuss the question as a group, and then answer it in front of the class using the graph as a model to defend their answer.

Commentary:

- Before students answer their question in front of the group, ensure that each group understands their question and is able to defend their answer using the graph.
- This activity can become a daily math routine that can be done during calendar or as a transition to start the morning.
- English language learners can benefit from sentence frames such as:
  - “\_\_\_\_\_ students answered this question.”
  - “More students answered \_\_\_\_\_.”
  - “Fewer students answered \_\_\_\_\_.”
  - “\_\_\_\_\_ and \_\_\_\_\_ have the same number of students that answered.”
  - “\_\_\_\_\_ students answered \_\_\_\_\_.”
- As students become familiar with this activity, you may want to ask higher-level interpretation questions such as
  - “How many more/less are in \_\_\_\_\_ than \_\_\_\_\_?”
  - “Which category did more than half of the students answer?”
- The teacher can also pull popsicle sticks and ask individual students to answer the question if time does not allow for small group discussion.
- Other questions to ask students as variations on this task:
  - “How do you get to school?” Possible categories: bus, walk, car/truck
  - “Which animal do you like best?” Possible categories: dog, cat, bird
  - “Do you have siblings?” Possible categories: brother, sister, none
  - “Which food do you like best?” Possible categories: pizza, spaghetti, chicken nuggets
  - “Which activity do you like to do best at recess?” Possible categories: swing, slide, dig

Solution: Solution

Once students have all placed their squares in the pocket chart, you will have a bar graph with three categories. Here are some examples of student answers to two of the questions:

How many students answered this question?

*“Eighteen students answered the question. I know because I counted up all the squares and there are 18 of them.”*

Which has the most?

*“Chocolate has the most students who prefer it. I know because the bar for chocolate is taller than the bars for the other flavors.”*



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