



Graph Game

By: Lori McDonald
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Math
Grades K-2



Introduction

This lesson has a fun, interactive game component to assist in teaching first graders in learning about collecting and interpreting data.

Learning Objectives

([CCSS.MATH.CONTENT.1.MD.C.4](#)) Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Materials Needed

- Dice (1 for each child)
- [Copies of graph \(included\)](#)
- Crayons

Procedure

Warm-up - Bring students together and brainstorm different kinds of ice cream. Make a list of the flavors mentioned. Ask each student to name their favorite flavor of ice cream. Record this on a list that students can see.

1. Use the data you collected about ice cream flavors to create a bar graph, labeling it accordingly.
2. Begin a discussion with students about the graph. Ask questions like: **Which flavor did the most students like the most? Which one has the least? How many students did I ask about their favorite ice cream flavor? How many more liked chocolate than vanilla? etc.**
3. Allow students to return to their seats and provide them with 1 die and a copy of the graph. Demonstrate for students how to roll the die on their desk and color a square for the number that you roll, making sure to tell them to begin at the bottom of the bar graph. After you've given several examples, allow students to work on their own. Set a timer for 5 minutes (or any amount of time that is appropriate for your group).
4. When time is up, lead the group in a discussion asking questions about their graphs. Ask the following questions: **Which number did you roll the most? Which one did you roll the least? How many times did you roll the dice? How many more times did you roll 6 than 1? etc.**

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Evaluation

As a formative assessment, have students complete the following exit ticket. First, have students switch graphs with their neighbor.

- Which number did your classmate roll the most?
- Which number did your classmate roll the least?
- How many times did your classmate roll the dice?
- How many more times did your classmate roll a 5 than a 2?
- Tell me two ways that your graph was different from your classmate's graph.