



PERFORMANCE TASK: Favorite Sports

Approximately 1-2 days

STANDARDS FOR MATHEMATICAL PRACTICE

MCC1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

MCC1.MD.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.

STANDARDS FOR MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

BACKGROUND KNOWLEDGE

Students should have prior experiences creating a tally chart. Students should be able to answer questions about a chart including which sport has the most and least votes.

ESSENTIAL QUESTIONS

- What information can we get from a chart?
- How do tables and charts help us organize our thinking?
- How can I collect data from my classmates?

MATERIALS

- Chart paper for class tally chart
- Favorite Sport Graphing Sheet
- Sports Ball Pictures

GROUPING

Individual

TASK DESCRIPTION, DEVELOPMENT AND DISCUSSION

Part I

Ask students if any of them like to play or watch sports. Allow students a few minutes to share their experience with sports. Tell the students that your elementary school is thinking about offering some sporting events after school, (or some other similar actual school situation) and would like to know which sport would be the best to offer. Ask students for ideas about how they could collect this data for the class to share with the principal. Allow students to share their ideas for recording. After class discussion, lead the class in creating a chart using tally marks. Create a chart like the one below on chart paper. Allow students to place a tally mark on the chart to show their favorite sport. After all the tally marks have been recorded, ask students the following questions:

- How did we represent each student's vote?
- How many people chose (football) as their favorite sport?
- Which sport did students like the most?
- Which sport did students like the least?
- Can you think of other questions we can ask that could be answered by the information on this graph?

Part II

After discussing the tally chart, tell students that when you collect data from a variety of people, you get different results. Have the class take their data sheet onto the playground. Choose at least 15 students to collect data from.

While students are working, circulate and ask students questions such as:

- How many students have you surveyed so far? How do you know?
- How many more people like (football) than (soccer)?
- Which sport is the most popular so far? How do you know? Least popular?

Allow students to compare their findings with a partner. Have students discuss any similarities and differences they may see within each other's charts.

FORMATIVE ASSESSMENT QUESTIONS

- Can you identify the sport with the most and least votes?
- Can you explain your chart?
- Can you come up with questions about your chart?
- Can you explain how charts and tables help you organize your thinking?

DIFFERENTIATION

Extension

- You may challenge students by having them write additional questions about their graphs which their classmates can answer.

Intervention

- Students may survey a smaller group of students on the playground.



Favorite Sports

Data collection by _____

Fill in the question and answer choices below. Find 30 students on the playground and ask your question below. Be sure to provide the answer choices when asking the question.

Question: _____

Answer Choices: 1. _____ 2. _____ 3. _____

| Sport | Tally Marks | Total Number Of Votes |
|-------|-------------|-----------------------|
| 1. | | |
| 2. | | |
| 3. | | |

Write 2 questions that you could ask a friend about your chart.

1. _____

2. _____