

## **Grade 7 Data Analysis: Sample 1**

### ***Designing a Useful Survey***

#### **Context**

This class had completed several surveys on topic of either the teacher's choosing or their own. The students had experience graphing both by hand and using computers in the school's computer lab.

#### **Mathematical Concepts**

- formulate questions for investigation, from a real-world context
- select, defend, and use appropriate methods of collecting data including: designing and using questionnaires, interviews, experiments, and research
- display data by hand or by computer in a variety of ways, including circle graphs
- read and interpret graphs

#### **Process**

Students were asked to work individually to come up with a survey question for their classroom. The data had to be informative and useful to the classroom or school in some way.

Students were required to graph their data in two different ways, and to list seven significant findings. As well, they were to answer the following questions:

- Why is your survey important to the school or our classroom?
- Who would find this information helpful or interesting?
- How could it benefit the school experience for students at our school?
- What problems did you encounter during this activity?
- If you had the opportunity to do this activity again using the same topic, what would you do differently?

## Meets Expectations (Minimal Level)

|                                  | NOT YET | MEETS | FULLY | EXCEEDS |
|----------------------------------|---------|-------|-------|---------|
| SNAPSHOT                         |         |       |       |         |
| CONCEPTS AND APPLICATIONS        |         |       |       |         |
| STRATEGIES AND APPROACHES        |         |       |       |         |
| ACCURACY                         |         |       |       |         |
| REPRESENTATION AND COMMUNICATION |         |       |       |         |

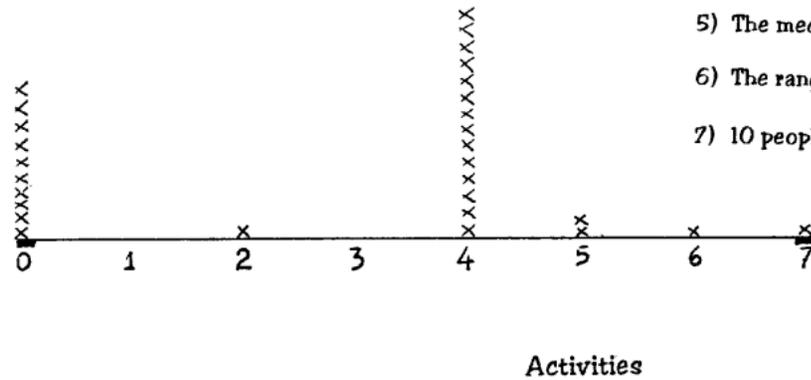
### Teacher's Observations

This student's work satisfies the basic requirements of the task, but not all the questions are answered, and findings identified are very simple ones. The graphs are incompletely labelled.

- identifies most mathematical concepts and procedures needed to solve a problem; may oversimplify or miss some aspects of the task
- generally follows instructions without adjusting or checking procedures
- may include some recording errors
- most work is clear although some necessary information may be omitted
- explanation of results includes little or no mathematical language

# FINDINGS

## CAMP WEBB ACTIVITIES

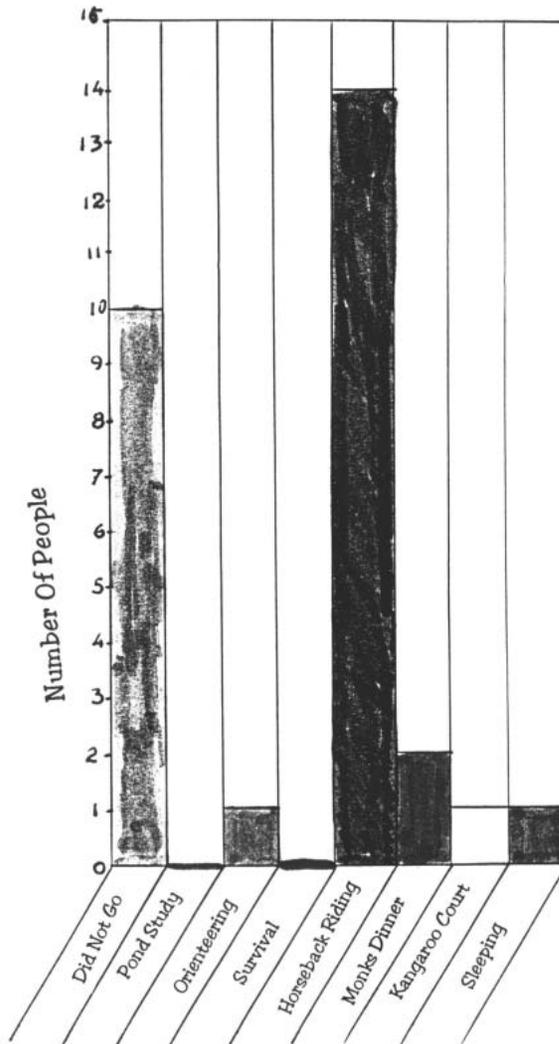


### Legend

- 0=Did Not Go
- 1=Pond Study
- 2=Orienteering
- 3=Survival
- 4=Horseback Riding
- 5=Monks Dinner
- 6=Kangaroo Court
- 7=Sleeping

- 1) Most people liked horseback riding.(14)
- 2) Nobody liked Pond Study or Orienteering.
- 3) The mode is one person.
- 4) The mean (average) is 3.625 people.
- 5) The median is 1 person.
- 6) The range is 14 people.
- 7) 10 people did not go to Camp Webb.

## CAMP WEBB ACTIVITIES



# FINAL REMARKS

This survey is important to the school because with this survey the school can organize more horseback riding and favorite subjects instead of the non-favorite subjects. The principal can use this information to schedule more time on better subjects that students like. When the principal schedules more on these favorite subjects more kids will want to go and then Camp Webb will earn more money. A problem I encountered was I had to get all the teachers in the class at that time so I did then I finished my graphs but at that time another teacher came in so I had to make my graph all over again. I forgot to put some activities in e.g. (hayride...) so if I could make my graph all over again I would put those other activities in too.

## Fully Meets Expectations

|                                  | NOT YET | MEETS | FULLY | EXCEEDS |
|----------------------------------|---------|-------|-------|---------|
| SNAPSHOT                         |         |       |       |         |
| CONCEPTS AND APPLICATIONS        |         |       |       |         |
| STRATEGIES AND APPROACHES        |         |       |       |         |
| ACCURACY                         |         |       |       |         |
| REPRESENTATION AND COMMUNICATION |         |       |       |         |

### Teacher's Observations

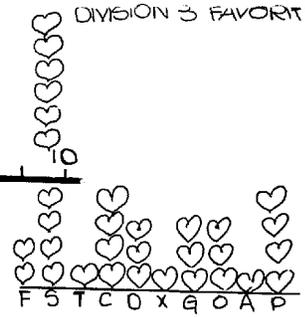
This student's work satisfies all the basic requirements of the task. He was able to explain the usefulness of the data he collected and who might use it. He was also able to suggest a way in which he could improve on his procedures.

- identifies the mathematical concepts and procedures needed to solve a problem or complete a task
- applies relevant concepts, skills, and strategies appropriately
- calculations are generally accurate
- work is generally clear and easy to follow
- graphs have minor errors
- explains results logically, in own words, using some mathematical language

DIVISION 3 FAVORITE INSTRUMENTS



DIVISION 3 FAVORITE INSTRUMENTS



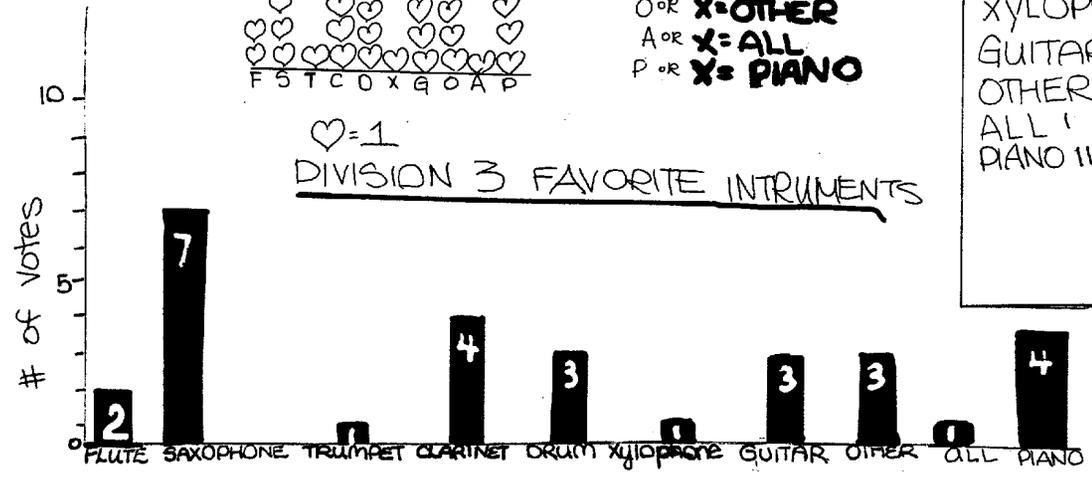
- F OR X = FLUTE
- S OR X = SAXOPHONE
- T OR X = TRUMPET
- C OR X = CLARINET
- D OR X = DRUM
- X OR X = Xylophone
- G OR X = GUITAR
- O OR X = OTHER
- A OR X = ALL
- P OR X = PIANO

DATA

- FLUTE II ②
- SAXOPHONE III II ⑦
- TRUMPET I ①
- CLARINET IIII ④
- DRUM III ③
- XYLOPHONE I ①
- GUITAR III ③
- OTHER III ③
- ALL I ①
- PIANO IIII ④

♥ = 1

DIVISION 3 FAVORITE INSTRUMENTS



### FINDINGS

- 1) SAXOPHONE IS THE MOST.
- 2) TRUMPET AND <sup>ALL</sup> LESS.
- 3) OTHER, GUITAR AND DRUM ARE ALL 3.
- 4) There are 10 instruments.
- 5) The total is 31 people. -
- 6) IT IS ABOUT DIVISION 3.
- 7) CLARINET AND PIANO ARE BOTH 4.

### FINAL

### REMARKS

My SURVEY is important to the school, because people can choose what instrument they wanna choose when they are grade 6<sup>s</sup> and 7<sup>s</sup>. The grade 5 and 6 may find this interesting.

I find some confuse from my graph. I would make my graph more colorful.