



What a Zoo!

What are the most common household pets?

Here is a data table from a fictitious school that participated in the Census at School online survey.

Household pets

Pet	Number of responses
Bird	11
Cat	9
Dog	14
Fish	12
Gerbil	8
Guinea pig	5
Hamster	7
Rabbit	6
Reptile	7
No pets	18
Other	6

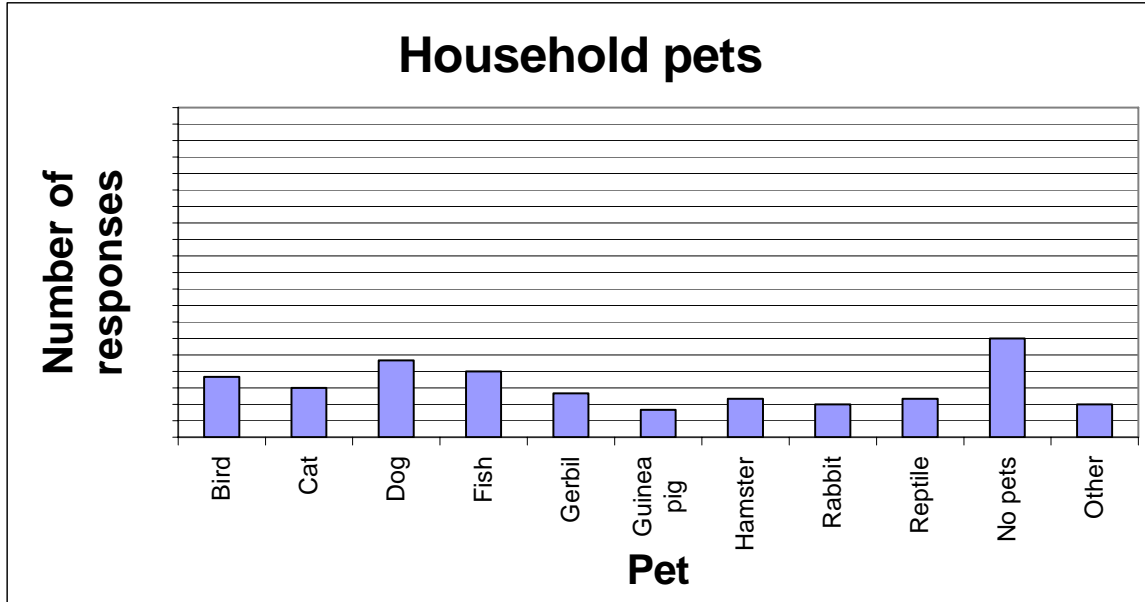
Jordan, Keiko, and Kim each created a bar graph to display the data.

1. The scales on Jordan's and Keiko's graphs are missing. (See page 2.) Using the data provided above, determine the scale that each used. Write these scales on the graphs.
2. Sometimes people choose to use different scales on graphs to communicate different ideas.

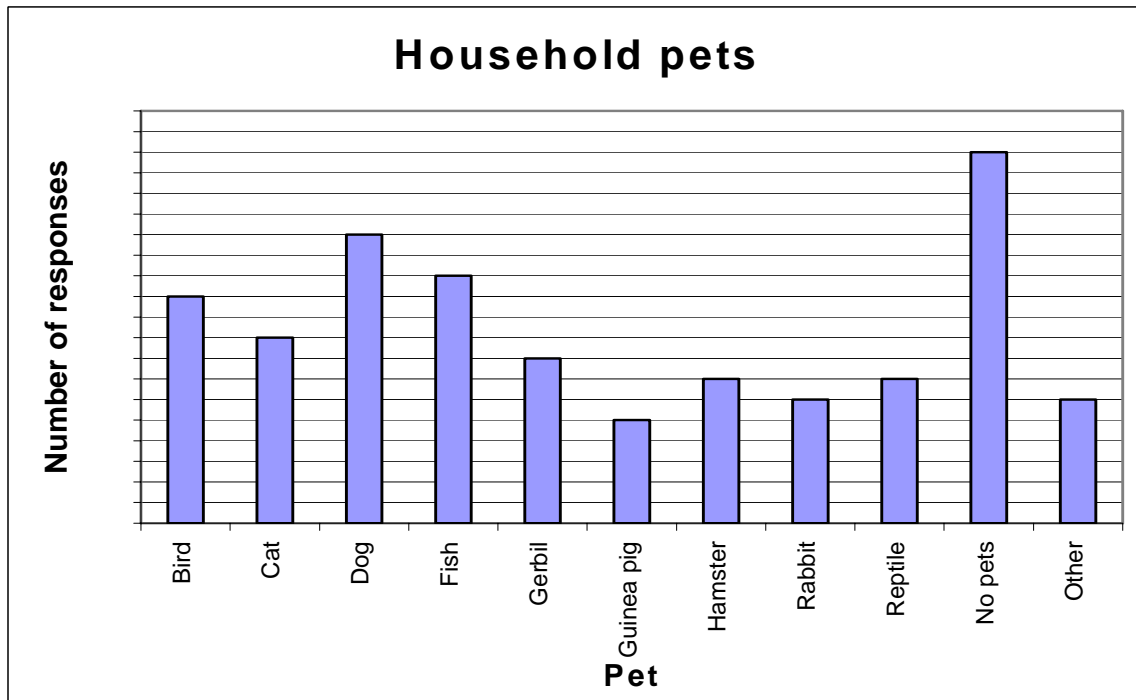
What ideas are communicated by Jordan's graph?

What ideas are communicated by Keiko's graph?

Jordan's graph:

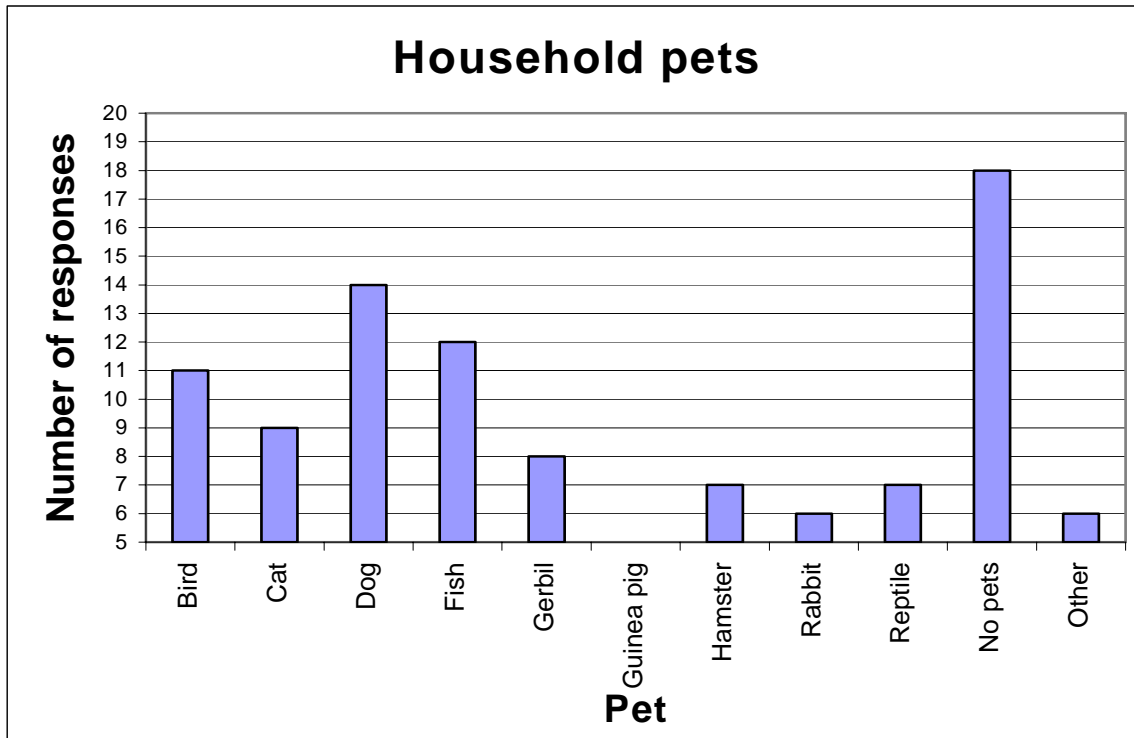


Keiko's graph:



3. The way Kim chose to represent the data is shown below.

Kim's graph:



In your opinion, in what ways is Kim's graph mathematically correct? In what ways is it mathematically incorrect?

How is Kim's graph different from Jordan's and Keiko's graphs?

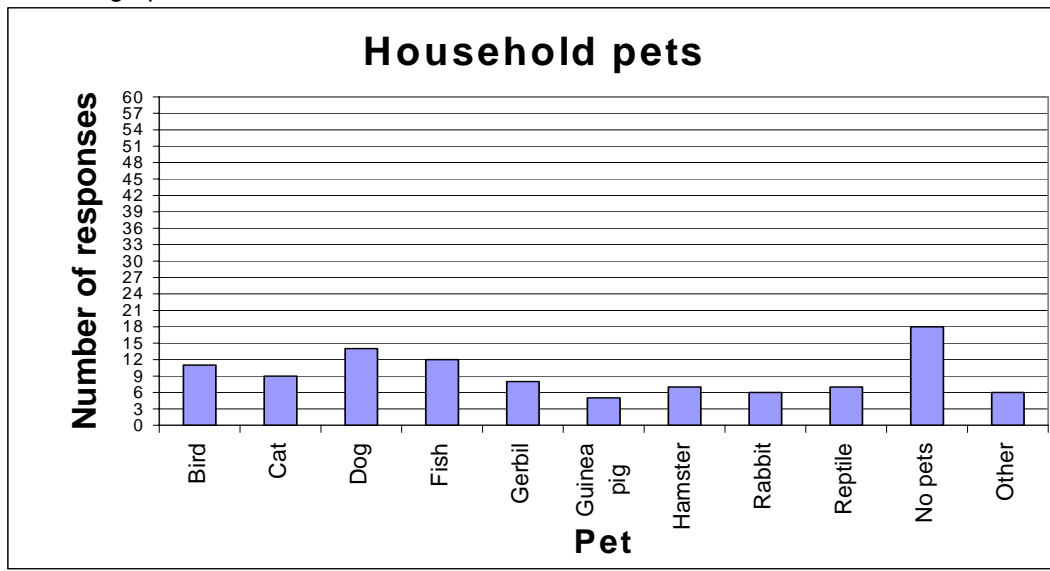
What ideas does Kim's graph communicate that are different from the ideas communicated by Jordan's and Keiko's graphs?

Hints for teachers

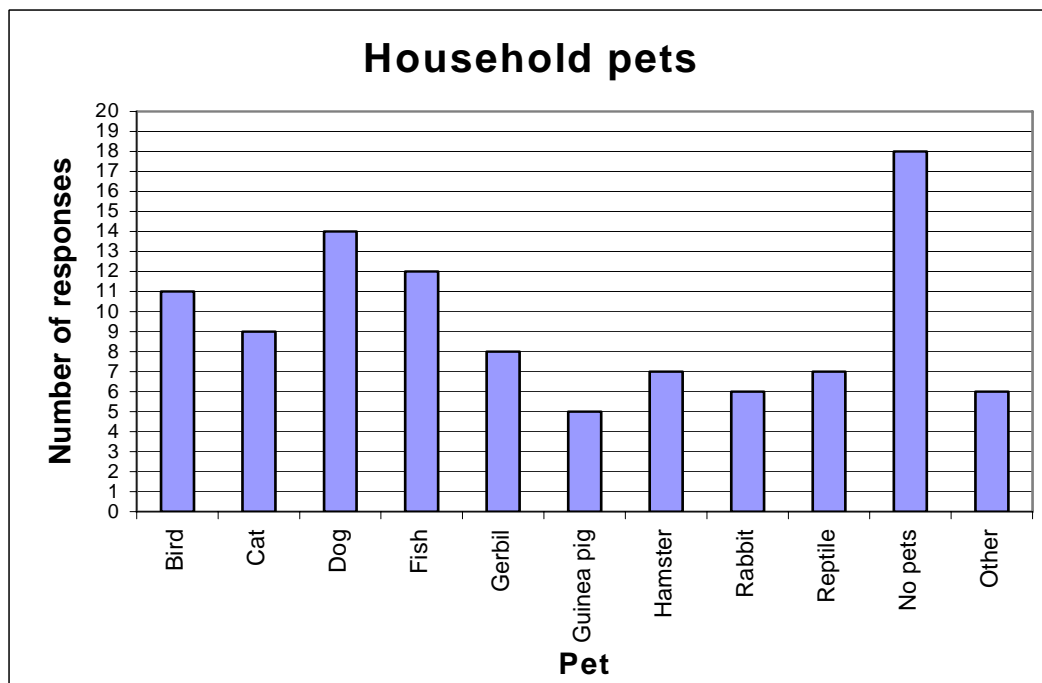
- Have students share their responses with the rest of the class so they can see the diversity of possible responses. Facilitate a discussion about the differences.
- Have students create their own graph using the data from your class results.
- Once the Canadian results are available on the Census at School website, you could construct a table using a random sample of data retrieved from the database.

The scales used by Jordan and Keiko are shown below.

Jordan's graph:



Keiko's graph:



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