

2 Collecting and Organizing Data

Using a Survey

To find out information you want to know, you can create a set of questions to ask people. This set of questions is called a survey.

Usually, you give people a choice of answers for each question.

For example, suppose you were trying to figure out what school trip most students in your school would like to take. You might ask questions like these:

- Would you rather take an overnight trip or a day trip?
- Would you rather go somewhere close or somewhere farther away?
- Where would you like to go most: a factory, a farm, a museum, or a conservation area?

You need to collect the information from enough people and from the kinds of people you want the information from. For example, you might ask students only or teachers only or both teachers and students.

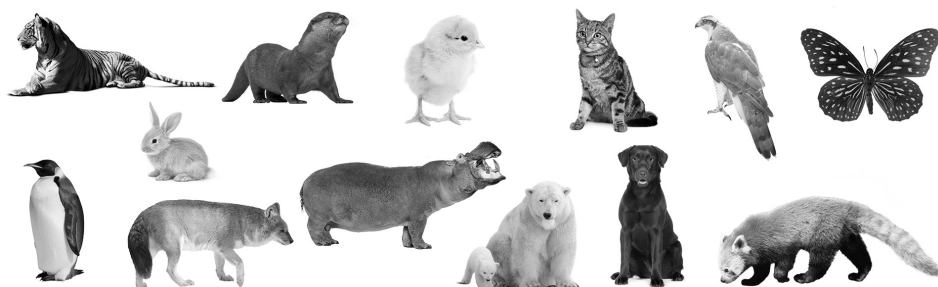
The data you collect can also be numbers. For example, you could ask this question:

- How many after-school activities do you do in a week that happen before dinner?

Survey Questions to Avoid

- You should not use survey questions with too many possible answers. If you do, you will not know how to organize your answers.

For example, a question like “What is your favourite animal?” might give you almost as many different answers as the number of people you survey. You will have trouble grouping the answers.



Survey Questions to Avoid (continued)

- You should not use questions on a survey that are hard to answer clearly. If you do, you will not be sure your results are meaningful.

For example, responses to a question like “Do you like sports?” will not tell you whether the person likes playing or watching sports, whether the person likes all sports or just some, or whether the person likes sports a little or a lot.

Collecting the Data and Organizing the Results

When you collect data, you need a simple way to record people’s answers. For example, a frequency table based on a tally chart organized by possible answers shows how many people give each answer.

The Biggest Pet You Have

Dog	4
Cat	2
No pets	6
Other pet	1

Definitions

data: facts or information

frequency table: a table that shows the number of occurrences for each category in a data set

survey: the collection of data from a small group (a sample) to learn about the characteristics of a large group (a population)

tally chart: a chart for recording data using tally mark

Heads	Tails