

## Chapter 2 Test

### Multiple Choice

For each question, select the best answer.

1. Which is a secondary data source?

**A** measuring the amount of rainfall this month

**B** asking people in your community who they plan to vote for in the next municipal election

**C** surveying your classmates to find out what their favourite pastime is

**D** using data collected by a professional polling firm

2. Carmelo wants to know who is likely to be elected student council president. Which is the population for this survey?

**A** all the students in Carmelo's class

**B** all the students in Carmelo's grade

**C** all the students at Carmelo's school

**D** everyone in Carmelo's community

3. Interpolation is

**A** the process of estimating a value outside the range of the data

**B** the process of estimating a value between two measurements in a set of data

**C** drawing a conclusion based on reasoning and the data

**D** a variable that affects the value of another variable

### Short Response

4. Write a hypothesis about the relationship between each pair of variables. Then, state the opposite of each hypothesis.
- a)** mass of backpack and number of visits to a chiropractor

**b)** number of courses and amount of homework

**c)** exchange rate between the Canadian and U.S. dollars and the number of Canadians who vacation in the United States

5. The coaches of the junior hockey league wish to survey a representative sample of the players.

**a)** What is the population?

**b)** Describe how to select a simple random sample of players.

**c)** How could you select a stratified random sample of players?

**d)** How could you select a non-random sample?

6. Make a scatter plot of the data in the table. Draw a line or curve of best fit. Explain your choice.

<b>x</b>	1	2	3	6	9	5	6
<b>y</b>	9	5	2	1	1	2	2

### Extend

7. This table shows the population of a settlement from 1805 to 1875.

<b>Year</b>	<b>Population</b>
1805	84
1815	89
1825	86
1835	93
1845	96
1855	107
1865	110
1875	109

- a)** Make a labelled scatter plot of the data.
- b)** Describe the trend in the population.
- c)** Identify any outliers.
- d)** Draw a line or curve of best fit.
- e)** Estimate the population in 1850.