# Careers in Data Management

**Strand**
Data Management

**Student Text Pages**
262–263

**Suggested Timing**
80 min

**Tools**
• computers with Internet access

**Related Resources**
BLM 4-15 Chapter 4 Task Rubric

**Accommodations**

**Language**—allow students to work with a partner. Have students provide some responses orally to check for comprehension.

**Motor**—allow students extra time. Assist students with recording calculations.

## Specific Expectations

### Apply Data Management

**DM2.05** gather, interpret, and describe information about applications of data management in occupations, and about college programs that explore these applications

## Teaching Suggestions

- Have students read the Task and ensure they understand what they are being asked to do.
- Have students work in groups to brainstorm strategies for completing the Task. Discuss the strategies and review necessary skills and concepts for completing the problem.
- Review the requirements for writing a report.
- Ensure that computers with Internet access are available to students.
- Circulate as students complete the Task and assist them as necessary.

### Prompts for Getting Started

Ask students the following questions:

- What is the Task asking you to do?
- How many careers do you need to investigate in detail?
- Where can you find information on careers and college programs?
- What are the requirements for a complete report?

### Hints for Evaluating a Response

Student responses are being assessed for the level of mathematical understanding they demonstrate. As you assess each response, consider the following questions:

- How much assistance did the student need to understand what information was required?
- How much assistance did the student need to find career and education information?
- How much assistance did the student need to complete the Task?
- What parts of the Task did the student complete or not complete?
- Did the student present work that is clear and easy to follow and understand?
- Are the student's answers supported by references to Internet sources used?

**Level 3 Sample Response**

1. Data management is used in retail and marketing fields. Marketers use data to improve sales and to compare results to data from previous years and from competitors. Advertisers use statistics to sell products and services. Journalists use graphs, percents, and probabilities in newspaper and magazine articles. Meteorologists use weather statistics to make predictions about the weather. People involved in product testing also need data management skills.
2. Sports team managers, sports reporters, and sports marketers use of data management to plan game schedules, calculate the risk of employing an injury-prone player, or calculate batting averages and win-loss percents.
3., 4. I chose the career of sports marketer. A sports marketer could study business administration in college. Durham College offers a three-year Advanced Diploma in the Business Administration-Marketing. Go to *https://myplace.durhamcollege.ca/durham/program.do?from=subject&programID=57* for more information about the program.

**Admission Requirements**

- OSSD, GED, ACE (BTSD) or mature student status
- Senior level (Grade 11 or higher) subject credits (G, A, C, M or U)
- Grade 12 English
- Grade 12 mathematics

**First Year Courses**

**Semester 1**

Accounting I
Business Mathematics
College Communication Skills
Human Resource Management I
Marketing I
Operations Management I
Business Computer Applications I

**Semester 2**

Accounting II
Business Computer Applications II
Business Mathematics
College Communication Skills
Economics I
Human Resources Management II
Introduction To Programming
Marketing II
Operations Management II

## Level 3 Notes

Look for the following:

- three careers that involve data management are chosen
- entry requirements listed are appropriate and current
- names of first year courses are listed
- report is logically organized and clearly presented
- sources of additional information are listed
- use of mathematical language relating to data management is effective

### What Distinguishes Level 2

Look for the following:

- three careers that involve data management are chosen, but the connection to data management is not made clear
- entry requirements listed are not specific to a relevant college program
- names of first year courses listed are for a general area and not for a specific program
- report is somewhat lacking in logical organization; some statements may be confusing
- few (if any) sources of additional information are listed
- use of mathematical language relating to data management is somewhat effective

### What Distinguishes Level 4

Look for the following:

- three careers that involve data management are chosen, with the connection to data management clearly explained using examples
- entry requirements listed are appropriate and current; a full range of alternate entry requirements is listed
- names of first year courses are listed; contents of course are detailed, particularly for courses involving mathematics or data management
- report is logically organized and very clearly presented, with written and visual forms
- many sources of additional information are detailed
- use of mathematical language relating to data management is highly effective

### Ongoing Assessment

- Use **BLM 4-15 Chapter 4 Task Rubric** to assess student achievement.

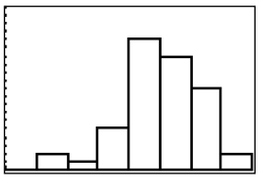
**College Preparation Test Answers (page 263)**

**1.** B
**2.** D
**3.** A
**4.** C
**5.** D
**6.** A
**7.** D
**8.** C
**9.** B
**10.** B
**11.** D
**12.** A
**13.** B
**14. a)** mean: 138.08; median: 140; mode: 140; standard deviation: 12.5

**b)**

| Eruption Height (ft) | Frequency |
|---|---|
| 90–99 | 0 |
| 100–109 | 2 |
| 110–119 | 1 |
| 120–129 | 5 |
| 130–139 | 16 |
| 140–149 | 14 |
| 150–159 | 10 |
| 160–169 | 2 |

**c)**

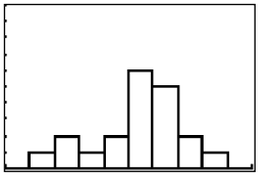


Xmin = 90, Xmax = 170, Xscl = 10, Ymin = 0, Ymax = 20, Yscl = 1

**15. a)**

| Dosage (milli-roentgens) | Frequency |
|---|---|
| 3.80–3.89 | 1 |
| 3.90–3.99 | 2 |
| 4.00–4.09 | 1 |
| 4.10–4.19 | 2 |
| 4.20–4.29 | 6 |
| 4.30–4.39 | 5 |
| 4.40–4.49 | 2 |
| 4.50–4.59 | 1 |

**b)**



Xmin = 3.7, Xmax = 4.7, Xscl = 0.1, Ymin = 0, Ymax = 10, Yscl = 1

**c)** mean: 4.237; median: 4.265; mode: 4.36; standard deviation: 0.17