

Analyzing Data

Section 4 Representing Data

Main Idea

Details

Scan Section 4 of your text. Use the checklist below as a guide.

- Read all section titles.
- Read all tables and graphs.
- Look at all pictures and read the captions.
- Think about what you already know about data analysis.

Write facts you learned about representing data as you scanned the section.

1. _____
2. _____
3. _____

New Vocabulary

Use your text to define each term.

graph

Section 4 Representing Data (continued)

Main Idea

Details

Graphing

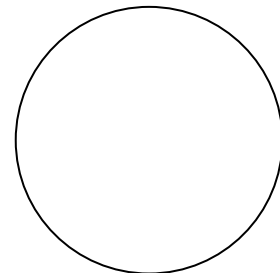
Use with pages 55–56.

Draw and label (a) a circle graph and (b) a bar graph using the information in the table below.

Student Budget	
Budget items	Percent
Car insurance	45
Movies	6
Books	5
Clothing	30
Miscellaneous	4
Gas	10

Student Budget bar graph

Student Budget circle graph



The _____ best displays the data in the Student Budget table because _____.

Section 4 Representing Data (continued)

Main Idea

Line Graphs

Use with pages 56–57.

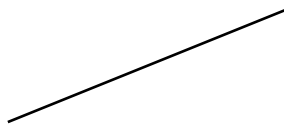
Interpreting Graphs

Use with pages 57–58.

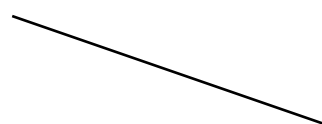
Details

Identify each of the following slopes.

_____ slope



_____ slope



Analyze whether the following sequences will likely plot as linear or nonlinear relationships.

Sequence A:

Result 1: 2

Result 2: 4

Result 3: 7

Result 4: 10

Answer: _____

Sequence B:

Result A: 31

Result B: 27

Result C: 49

Result D: 45

Answer: _____

Organize information about interpreting graphs by completing the sentences below.

Information on a graph typically consists of _____ types of variables: _____ variables and _____ variables. The relationship between the variables may reflect either a _____ or a _____ slope.

When reading the graph, you use either interpolation for _____ or _____ for estimated values beyond the plotted points.

Analyzing Data Chapter Wrap-Up

Now that you have read the chapter, review what you have learned. Write out the key equations and relationships.

density =

percent error = _____ × 100

slope =

Conversion between temperature scales:

°C + _____ = _____

K - _____ = _____

Review

Use this checklist to help you study.

- Study your Science Notebook for this chapter.
- Study the definitions of vocabulary words.
- Review daily homework assignments.
- Reread the chapter and review the tables, graphs, and illustrations.
- Answer the Section Review questions at the end of each section.
- Look over the Study Guide at the end of the chapter.

SUMMARIZE

If you were a scientist, what precautionary guidelines would you use to ensure the accuracy of your data and to provide a clear representation of that data?
