

Introduction to Chemistry

Before You Read

Science Journal

Before you read the chapter, write down four facts you know about chemistry.

1. _____

2. _____

3. _____

4. _____

Write three questions about scientific methods and research.

1. _____

2. _____

3. _____

Introduction to Chemistry

Section 1 A Story of Two Substances

Main Idea

Details

Scan *Section 1 of your text. Use the checklist below as a guide.*

- Read all section titles.
- Read all boldfaced words.
- Read all tables and graphs.
- Look at all pictures and read the captions.
- Think about what you already know about ozone and chlorofluorocarbons (CFCs).

Write *four facts you discovered about ozone and CFCs.*

1. _____
2. _____
3. _____
4. _____

New Vocabulary

Use your text to define each term.

chemistry

substance

Section 1 A Story of Two Substances (continued)

Main Idea _____

The Ozone Layer

Use with pages 5–7.

Details _____

Detail *the ozone layer by completing the following paragraph.*

Overexposure to _____ causes sunburn, is harmful to _____, lowers _____, and disrupts _____. When _____ is exposed to ultraviolet radiation in the upper regions of the _____, a chemical called _____ is formed. About _____ of Earth's ozone is spread out in a layer that surrounds and _____ our planet. Ozone forms over the _____ and flows toward the _____.

Sequence *the steps necessary for the formation of ozone.*

1. _____

2. _____

3. _____

Illustrate *the balance between oxygen gas and ozone levels in the stratosphere, using Figure 3 in your text as a model. Give it a title and label the parts of your model.*

Section 1 A Story of Two Substances (continued)

Main Idea

Details

Chlorofluorocarbons

Use with pages 7–8.

Analyze the graph in Figure 6. Write a brief description of the concentration of CFCs from 1979 through 2010.

Analyze chlorofluorocarbons by completing the following table.

| CFCs Were First Developed Because: | Facts about CFCs | Uses of CFCs |
|---|-------------------------|---------------------|
| | | |

REAL-WORLD CONNECTION

Infer from your reading the potential connection between CFCs and the ozone layer. Use Figures 5 and 6 to draw your conclusions.
