

The Elements



Chapter Pacing Guide

Please note that this pace is based on completing selected sections of the text in 90 classes, approximately 90 minutes each. Refer to the Course Planning Guide on page xvii of this booklet for a complete list of time allotments assigned to each section. Less time can be allocated for each chapter if you plan to teach all 26 chapters.

Period	Content
0.5	7.1 Properties of s-Block Elements
0.5	7.2 Properties of p-Block Elements
0.5	7.3 Properties of d-Block and f-Block Elements
0.5	Review and Assessment

Properties of s-Block Elements *pages 179–185*

Key: SE = Student Edition,
TWE = Teacher Wraparound Edition,
TCR = Teacher Classroom Resources

National Science Content Standards: UCP.1, UCP.2, UCP.5; A.1; B.1, B.2, B.3, B.6; E.2; F.5; G.3

Georgia QCC: 1, 1.2, 2.1, 3.1, 4, 5.2, 5.3, 6, 9.6

Objectives

- **Explain** how elements in a given group are both similar and different.
- **Discuss** the properties of hydrogen.
- **Describe** and **compare** the properties of alkali metals and alkaline earth metals.

Lesson Resources

- _____ Section Focus Transparency 23 and Master
- _____ Teaching Transparency 22 and Master
- _____ *ChemLab and MiniLab Worksheets*, pp. 25–28
TCR
- _____ *Study Guide for Content Mastery*, pp. 37–38 TCR

- _____ **Cosmic Chemistry Videodisc**, Disc 2, Side 3
- _____ *Using the Internet in the Science Classroom*, TCR
- _____ Chemistry Web site: ga.science.glencoe.com

Multimedia Resources

- _____ **Chemistry Interactive CD-ROM**, Section 7.1
Exploration
- _____ **MindJogger Videoquizzes**, Ch. 7
- _____ **Guided Reading Audio Program**, Section 7.1

Optional Resources

- _____ *Challenge Problems*, p. 7 TCR
- _____ *Solving Problems: A Chemistry Handbook*,
Section 7.1 TCR
- _____ *Spanish Resources 7.1* TCR

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Display the Section Focus Transparency and have students answer the questions. • Distribute the corrected Chapter 6 tests. 	Section Focus Transparency 23 and Master	5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Chapter 7 with the Quick Demo. • Teach the main concepts of Section 7.1. • Have students read the ChemLab and begin the pre-lab steps. (Note: this lab will take 45 minutes to complete. Time adjustments may be necessary in subsequent lessons.) 	TWE, p. 180 TWE, pp. 179–185 SE, pp. 202–203	25–30 minutes
In-Class Check <ul style="list-style-type: none"> • Complete the Check for Understanding strategy. 	TWE, p. 185	5–10 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 7.1 Assessment. • Assign relevant questions from Chapter 7 Assessment. 	SE, p. 185 SE, pp. 206–209	5 minutes

[total = 45 minutes]

Properties of p-Block Elements pages 186–196

Key: SE = Student Edition, TWE = Teacher Wraparound Edition, TCR = Teacher Classroom Resources

National Science Content Standards: UCP.1, UCP.2, UCP.5; B.1, B.2, B.3; E.1, E.2; F.1, F.4, F.5, F.6; G.3
Georgia QCC: 4, 5.2, 5.3, 6

Objectives

- **Describe** and **compare** properties of p-block elements.
- **Define** allotropes and provide examples.
- **Explain** the importance to organisms of selected p-block elements.

Lesson Resources

- _____ Section Focus Transparency 24 and Master
- _____ Teaching Transparency 23 and Master
- _____ *Study Guide for Content Mastery*, pp. 39–40 TCR

- _____ *Using the Internet in the Science Classroom*, TCR
- _____ Chemistry Web site: ga.science.glencoe.com

Multimedia Resources

- _____ **Chemistry Interactive CD-ROM**, Section 7.2 Video and Experiment
- _____ **MindJogger Videoquizzes**, Ch. 7
- _____ **Guided Reading Audio Program**, Section 7.2
- _____ **Cosmic Chemistry Videodisc**, Disc 1, Side 1; Disc 2, Side 4; Disc 3, Side 5; Disc 3, Side 6; Disc 4, Side 8

Optional Resources

- _____ *Solving Problems: A Chemistry Handbook*, Section 7.2 TCR
- _____ *Spanish Resources 7.2 TCR*

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Display the Section Focus Transparency and have students answer the questions. • Have students check homework answers. 	Section Focus Transparency 24 and Master TWE, pp. 185, 206–209	5 minutes
Discussion <ul style="list-style-type: none"> • Answer any questions about homework. 	TWE, pp. 185, 206–209	0–5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Section 7.2 with the Concept Development activity. • Teach the main concepts of Section 7.2. 	TWE, p. 186 TWE, pp. 186–196	15–20 minutes
In-Class Check <ul style="list-style-type: none"> • Complete the Check for Understanding strategy. 	TWE, p. 196	15 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 7.2 Assessment. • Assign the Problem-Solving Lab. • Assign relevant questions from Chapter 7 Assessment. 	SE, p. 196 SE, p. 191 SE, pp. 206–209	5 minutes

[total = 45 minutes]

Properties of d-Block and f-Block Elements

pages 197–201

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National Science Content Standards: UCP.1, UCP.2, UCP.5; A.1, A.2; B.1, B.2, B.3, B.6; E.1, E.2; F.1, F.4, F.6; G.1

Georgia QCC: 1, 1.2, 2, 2.1, 3.1, 4, 5, 5.2, 5.3, 6, 9.6

Objectives

- **Compare** the electron configurations of transition and inner transition metals.
- **Describe** the properties of transition elements.
- **Explain** why some transition metals form compounds with color and some have magnetic properties.

Lesson Resources

- _____ Section Focus Transparency 25 and Master
- _____ Teaching Transparency 24 and Master
- _____ Study Guide for Content Mastery, pp. 41–42 TCR

Multimedia Resources

- _____ Chemistry Interactive CD-ROM, Section 7.3 Video
- _____ MindJogger Videoquizzes, Ch. 7
- _____ Guided Reading Audio Program, Section 7.3
- _____ Using the Internet in the Science Classroom, TCR
- _____ Chemistry Web site: ga.science.glencoe.com

Optional Resources

- _____ Laboratory Manual, pp. 49–52 TCR
- _____ Small-Scale Laboratory Manual, pp. 13–20 TCR
- _____ Solving Problems: A Chemistry Handbook, Section 7.3 TCR
- _____ Spanish Resources 7.3 TCR

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Display the Section Focus Transparency and have students answer the questions. • Have students check homework answers. 	Section Focus Transparency 25 and Master TWE, pp. 191, 196, 206–209	5 minutes
Discussion <ul style="list-style-type: none"> • Answer any questions about homework. 	TWE, pp. 191, 196, 206–209.	0–5 minutes
Core Lesson <ul style="list-style-type: none"> • Teach the main concepts of Section 7.3. • Use the Identifying Misconceptions strategy. 	TWE, pp. 197–201 TWE, p. 198	15–20 minutes
In-Class Check <ul style="list-style-type: none"> • Complete the Check for Understanding and Reteach strategies. • Answer questions on Chapter 7 to prepare students for the test. 	TWE, p. 201 TWE, pp. 178–209	15 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 7.3 Assessment. • Assign the Portfolio activity. • Assign relevant questions from Chapter 7 Assessment. 	SE, p. 201 TWE, p. 199 SE, pp. 206–209	5 minutes

[total = 45 minutes]

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Assessment Resources

- _____ *Chapter Assessment*, Ch. 7 TCR
- _____ *Performance Assessment in the Science Classroom*, TCR
- _____ *Alternate Assessment in the Science Classroom*, TCR
- _____ *Reviewing Chemistry: Mastering the Georgia QCC*, TCR

Multimedia Resources

- _____ **MindJogger Videoquizzes**, Ch. 7
- _____ **TestCheck Software**, Ch. 7
- _____ **Chemistry Interactive CD-ROM**, Ch. 7 quiz
- _____ **Vocabulary PuzzleMaker Software**, Ch. 7

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students check homework answers. 	TWE, pp. 199, 201, 206–209	5 minutes
Reviewing the Chapter <ul style="list-style-type: none"> • Answer any questions about homework. • Answer any final questions about Chapter 7. 	TWE, pp. 178–209	5 minutes
Assessment <ul style="list-style-type: none"> • Distribute the test and allow students to work quietly. 	<i>Chapter Assessment</i> , pp. 37–42 TCR	30–35 minutes
Closing <ul style="list-style-type: none"> • As students complete the test, have them read the Chapter 8 Opener. • If students have time, let them explore the Chemistry Online for Chapter 8. 	SE, p. 210 ga.science.glencoe.com	0–5 minutes

[total = 45 minutes]