Chemical Reactions

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
1	10.1 Reactions and Equations
0.5	10.2 Classifying Chemical Reactions
1	10.3 Reactions in Aqueous Solutions
0.5	Review and Assessment

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BLOCK SCHEDULE LESSON PLAN 10.1

Pacing Guide
1 period
Lesson and Discovery Lab

Reactions and Equations *pages 277–283*

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

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

Georgia QCC: 1, 1.2, 2.1, 3.1, 8, 9.1, 9.6

Objectives

- **Recognize** evidence of chemical change.
- **Represent** chemical reactions with equations.

Lesson Resources

_____ Section Focus Transparency 35 and Master
_____ Math Skills Transparency 11 and Master
_____ Teaching Transparencies 32–33 and Masters
_____ *Study Guide for Content Mastery*, pp. 55–56 *TCR*

Multimedia Resources

_____ **Chemistry Interactive CD-ROM,** Section 10.1 Demonstration and Exploration
_____ **MindJogger Videoquizzes,** Ch. 10
_____ **Guided Reading Audio Program,** Section 10.1
_____ **Cosmic Chemistry Videodisc,** Disc 2, Side 3
_____ *Using the Internet in the Science Classroom*, *TCR*
_____ Chemistry Web site: **ga.science.glencoe.com**

Optional Resources

_____ *Challenge Problems*, p. 10 *TCR*
_____ *Solving Problems: A Chemistry Handbook*, Section 10.1, *TCR*
_____ *Spanish Resources* 10.1 *TCR*

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management • Display the Section Focus Transparency and have students answer the questions. • Distribute the corrected Chapter 9 tests.	Section Focus Transparency 35 and Master	5 minutes
Core Lesson • Introduce Chapter 10 with Using the Photo. • Have students complete the Discovery Lab. • Teach the main concepts of Section 10.1.	*TWE*, p. 276 *SE*, p. 277 *TWE*, pp. 277–283	50 minutes
In-Class Check • Reinforce Section 10.1 concepts using the Identifying Misconceptions strategy. • Have students work in pairs to answer the Knowledge Assessment questions. • Complete the Check for Understanding and Reteach strategies.	*TWE*, p. 281 *TWE*, p. 282 *TWE*, p. 283	25 minutes
Homework • Have students complete the Concept Development activity. • Have students complete Section 10.1 Assessment. • Assign relevant questions from Chapter 10 Assessment.	*TWE*, p. 278 *SE*, p. 283 *SE*, pp. 304–307	10 minutes

[total = 90 minutes]

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BLOCK SCHEDULE LESSON PLAN 10.2

Pacing Guide
1/2 period
Lesson and ChemLab

Classifying Chemical Reactions *pages 284–291*

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

National Science Content Standards: UCP.3, UCP.5; A.1; B.2, B.3
Georgia QCC: 8, 9, 9.1, 9.2

Objectives

- **Classify** chemical reactions.
- **Identify** the characteristics of different classes of chemical reactions.

Lesson Resources

_____ Section Focus Transparency 36 and Master
_____ Teaching Transparencies 34–35 and Masters
_____ *ChemLab and MiniLab Worksheets*, pp. 38–40 *TCR*
_____ *Study Guide for Content Mastery*, pp. 57–58 *TCR*

Multimedia Resources

_____ **Chemistry Interactive CD-ROM,** Section 10.2 Demonstration, Video, and Animation
_____ **MindJogger Videoquizzes,** Ch. 10
_____ **Guided Reading Audio Program,** Section 10.2
_____ **Cosmic Chemistry Videodisc,** Disc 2, Side 3; Disc 3, Side 6
_____ *Using the Internet in the Science Classroom*, *TCR*
_____ Chemistry Web site: **ga.science.glencoe.com**

Optional Resources

_____ *Laboratory Manual*, pp. 73–80 *TCR*
_____ *Solving Problems: A Chemistry Handbook*, Section 10.2 *TCR*
_____ *Spanish Resources* 10.2 *TCR*

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management • Display the Section Focus Transparency and have students answer the questions. • Have students check homework answers.	Section Focus Transparency 36 and Master *TWE*, pp. 278, 283, 304–306	5 minutes
Discussion • Answer any questions about homework.	*TWE*, pp. 278, 283, 304–306	0–5 minutes
Core Lesson • Introduce Section 10.2 with Cultural Diversity: The Language of Chemistry. • Teach the main concepts of Section 10.2. • Have students read the ChemLab and begin the Pre-Lab activities. (Note: this lab will take one period to complete. Time adjustments may be necessary in subsequent lessons.)	*TWE*, p. 285 *TWE*, pp. 284–291 *SE*, pp. 300–301	25–30 minutes
In-Class Check • Reinforce Section 10.2 concepts with the Check for Understanding and Reteach strategies.	*TWE*, pp. 290–291	5 minutes
Homework • Have students complete the Problem-Solving Lab. • Have students complete Section 10.2 Assessment. • Assign relevant questions from Chapter 10 Assessment.	*SE*, p. 288 *SE*, p. 291 *SE*, pp. 304–307	5 minutes

[total = 45 minutes]

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BLOCK SCHEDULE LESSON PLAN 10.3

Pacing Guide
1 period
Lesson and MiniLab

Reactions in Aqueous Solutions *pages 292–299*

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

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

Georgia QCC: 1, 1.2, 2, 2.1, 3.1, 8, 9.1, 9.2, 9.3, 9.6, 16, 16.1

Objectives

- **Describe** aqueous solutions.
- **Write** complete ionic and net ionic equations for chemical reactions in aqueous solutions.
- **Predict** whether reactions in aqueous solutions will produce a precipitate, water, or a gas.

Lesson Resources

_____ Section Focus Transparency 37 and Master
_____ Math Skills Transparency 12 and Master
_____ Teaching Transparency 36 and Master
_____ *ChemLab and MiniLab Worksheets*, p. 37 *TCR*
_____ *Study Guide for Content Mastery*, pp. 59–60 *TCR*

Multimedia Resources

_____ **Chemistry Interactive CD-ROM,** Section 10.3 Experiment
_____ **MindJogger Videoquizzes,** Ch. 10
_____ **Guided Reading Audio Program,** Section 10.3
_____ *Using the Internet in the Science Classroom*, *TCR*
_____ Chemistry Web site: **ga.science.glencoe.com**

Optional Resources

_____ *Small-Scale Laboratory Manual*, pp. 25–28 *TCR*
_____ *Solving Problems: A Chemistry Handbook*, Section 10.3 *TCR*
_____ *Spanish Resources* 10.3 *TCR*
_____ *Supplemental Problems*, p. 11 *TCR*

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management • Display the Section Focus Transparency and have students answer the questions. • Have students check homework answers.	Section Focus Transparency 37 and Master *TWE*, pp. 288, 291, 304–306	5 minutes
Discussion • Answer any questions about homework.	*TWE*, pp. 288, 291, 304–306	5 minutes
Core Lesson • Introduce Section 10.3 concepts with the Visual Learning strategies. • Teach the main concepts of Section 10.3. • Have students complete the MiniLab in small groups.	*TWE*, p. 292 *TWE*, pp. 292–299 *SE*, p. 295	60 minutes
In-Class Check • Reinforce Section 10.3 concepts with the Knowledge Assessment activity. • Complete the Check for Understanding and Reteach strategies. • Answer questions on Chapter 10 in preparation for the test.	*TWE*, p. 299 *TWE*, p. 299 *TWE*, pp. 276–307	10–15 minutes
Homework • Have students complete Section 10.3 Assessment. • Assign relevant questions from Chapter 10 Assessment. • Assign supplemental problems to prepare students for the test.	*SE*, p. 299 *SE*, pp. 304–307 *Supplemental Problems*, p. 11 *TCR*	5–10 minutes

[total = 90 minutes]

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Pacing Guide
1/2 period
Review/Assessment

Chemical Reactions

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

Assessment Resources

_____ *Chapter Assessment*, Ch. 10 *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. 10
_____ **TestCheck Software,** Ch. 10
_____ **Chemistry Interactive CD-ROM,** Ch. 10 quiz
_____ **Vocabulary PuzzleMaker Software,** Ch. 10

Activity	Resources	Suggested Time
Classroom Management • Have students check homework answers.	*TWE*, pp. 299, 304–307 *Supplemental Problems*, p. 11 *TCR*	5 minutes
Reviewing the Chapter • Answer any questions about homework. • Answer any final questions about Chapter 10.	*Supplemental Problems*, p. 11 *TCR* *TWE*, pp. 276–307	5 minutes
Assessment • Distribute the test and allow students to work quietly.	*Chapter Assessment*, pp. 55–60 *TCR*	30–35 minutes
Closing • As students complete the test, have them read the Chapter 11 Opener. • If students have time, let them explore the Chemistry Online for Chapter 11.	*SE*, p. 308 **ga.science.glencoe.com**	0–5 minutes

[total = 45 minutes]

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