Lesson Plans
Glencoe Science

Student Edition
Teacher Wraparound Edition
Interactive Teacher Edition CD-ROM
Interactive Lesson Planner CD-ROM
Lesson Plans
Content Outline for Teaching
Directed Reading for Content Mastery
Foldables: Reading and Study Skills
Assessment
  Chapter Review
  Chapter Tests
  ExamView Pro Test Bank Software
  Assessment Transparencies
  Performance Assessment in the Science Classroom
  The Princeton Review Standardized Test Practice Booklet
Directed Reading for Content Mastery in Spanish
Spanish Resources
Guided Reading Audio Program

Reinforcement
Enrichment
Activity Worksheets
Section Focus Transparencies
Teaching Transparencies
Laboratory Activities
Science Inquiry Labs
Critical Thinking/Problem Solving
Reading and Writing Skill Activities
Cultural Diversity
Laboratory Management and Safety in the Science Classroom
MindJogger Videoquizzes and Teacher Guide
Interactive Explorations and Quizzes CD-ROM
Vocabulary Puzzlemaker Software
Cooperative Learning in the Science Classroom
Environmental Issues in the Science Classroom
Home and Community Involvement
Using the Internet in the Science Classroom

Glencoe/McGraw-Hill
A Division of The McGraw-Hill Companies

Copyright © by the McGraw-Hill Companies, Inc. All rights reserved. Except as permitted under the United States Copyright Act, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

Send all inquiries to:
Glencoe/McGraw-Hill
8787 Orion Place
Columbus, OH 43240

ISBN 0-07-826971-7
Printed in the United States of America
1 2 3 4 5 6 7 8 9 10 009 06 05 04 03 02 01
# Table of Contents

## To the Teacher

**Correlation of Life Science books of the *Glencoe Science Custom Curriculum Series* to the National Science Standards**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bacteria</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Protists and Fungi</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Plants</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Plant Reproduction</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Plant Processes</td>
<td>11</td>
</tr>
</tbody>
</table>
Lesson planning guides are provided for each section of the chapter. Within the Lesson Plans you will see Student Edition features that may have an accompanying worksheet found in the Chapter Resources Booklet (CRB). These worksheets are shown in parentheses after the feature. For example:

_____ Before You Read, p. 37 (Foldables, p. 17, CRB)

The Foldables worksheet can be used with the Before You Read feature in the Student Edition.

Each Lesson Plan is divided into several parts:

- **Schedule** lists the recommended number of class sessions to be devoted to each section of the chapter. Both traditional and block scheduling recommendations are given.

- **Objectives** provides the section objectives. Here you will also find the correlations to National Science Standards for the section.

- **Motivate** lists various resources to introduce the chapter or section to the students.

- **Teach** lists Student Edition and Teacher Edition features that are used as you teach the material. You’ll also find worksheet pages and other resources such as transparencies or Professional Series Books that are appropriate to use with the section.

- **Assess** provides references to the section assessment in the Student Edition as well as useful pages from the *Performance Assessment in the Science Classroom*.

- **Reteach/Reinforce** is where you will find worksheets that provide students with additional reinforcement of the chapter content.

- **Enrich/Apply** provides opportunities to challenge students with materials that go beyond the chapter content.

- **Chapter Assessment** lists Student Edition, worksheet, and transparency resources that assess students’ knowledge of the chapter material.

- **Multimedia Options** pulls together the many multimedia materials that can be used as reinforcement, review, extension, and assessment with your students.
## Correlation to National Science Education Standards

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Book, Chapter, and Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(UCP) Unifying Concepts and Processes</strong></td>
<td></td>
</tr>
<tr>
<td>1. Systems, order, and organization</td>
<td>A1-4, A2-1, A2-2, A3-3, B2-1, B2-2, B3-1, B5-1, B5-2, D1-1, D1-2, D1-3, D2-2, D3-1, D4-1, D4-2, D5-1, D5-2, D6-1, D6-2, D7-1, E1-1, E1-2, E1-3, E2-1, E2-2, E2-3, E3-1, E3-2, E3-3, E5-1, E5-2</td>
</tr>
<tr>
<td>2. Evidence, models, and explanation</td>
<td>A1-1, A1-2, A1-3, A3-1, A5-1, A5-2, A5-3, B1-2, D7-2, E4-1, E4-2, E4-3</td>
</tr>
<tr>
<td>3. Change, constancy, and measurement</td>
<td>A4-1, A4-2, A4-3, B4-1, C2-1, C2-2, C2-3, C2-4, C3-1, C3-2, C3-3, C3-4, C4-1, C4-2, C5-1, C5-2, D2-1, D6-2, E1-3</td>
</tr>
<tr>
<td>4. Evolution and equilibrium</td>
<td>A3-2, A4-2, A4-3, A6-1, A6-2, A6-3, D7-3, E5-1, E5-2</td>
</tr>
<tr>
<td>5. Form and function</td>
<td>A2-1, A2-2, B1-1, B2-1, B2-2, B3-2, B3-3, B4-2, B4-3, C1-1, C1-2, C1-3, D3-2, D3-3, D6-1, D6-3</td>
</tr>
<tr>
<td><strong>(A) Science as Inquiry</strong></td>
<td></td>
</tr>
<tr>
<td>1. Abilities necessary to do scientific inquiry</td>
<td>A1-1, A1-4, A2-1, A2-2, A2-3, A3-1, A3-2, A3-3, A4-1, A4-3, A5-1, A5-2, A5-3, A6-1, A6-3, B1-1, B1-2, B2-1, B2-2, B3-2, B3-3, B4-1, B4-2, B4-3, B5-1, B5-2, C1-1, C1-2, C1-3, C2-3, C2-4, C3-1, C3-2, C3-3, C3-4, C4-1, C4-2, C5-1, C5-2, D1-1, D1-2, D1-3, D2-1, D2-2, D3-2, D3-3, D4-1, D4-2, D5-1, D5-2, D6-2, D6-3, D7-1, D7-2, D7-3, E1-1, E1-2, E1-3, E2-1, E2-2, E2-3, E3-2, E3-3, E4-1, E4-2, E4-3, E5-1, E5-2</td>
</tr>
<tr>
<td><strong>(B) Physical Science</strong></td>
<td></td>
</tr>
<tr>
<td>1. Properties and changes of properties in matter</td>
<td>A1-1, A3-1, E2-2, E2-3</td>
</tr>
<tr>
<td>2. Motion and forces</td>
<td>D1-1, D1-2, E2-3</td>
</tr>
<tr>
<td>3. Transfer of energy</td>
<td>A3-3, E2-3</td>
</tr>
<tr>
<td><strong>(C) Life Science</strong></td>
<td></td>
</tr>
<tr>
<td>1. Structure and function in living systems</td>
<td>A1-2, A1-3, A1-4, A2-1, A2-2, A2-3, A3-1, A3-2, A3-3, A4-1, A4-3, A6-1, A6-2, A6-3, B1-1, B2-1, B2-2, B3-1, B3-2, B3-3, B4-1, B4-2, B4-3, B5-1, B5-2, C1-1, C1-2, C1-3, C2-1, C2-2, C2-3, C2-4, C3-1, C3-2, C3-3, C3-4, C4-1, C4-2, D1-1, D1-2, D1-3, D2-1, D2-2, D3-1, D3-2, D3-3, D4-1, D4-2, D5-1, D5-2, D6-1, D6-2, D6-3, D7-1, D7-2, D7-3, E1-1, E1-2, E1-3, E2-1, E2-2, E2-3, E3-2, E3-3, E4-1, E4-2, E4-3, E5-1, E5-2</td>
</tr>
<tr>
<td>2. Reproduction and heredity</td>
<td>A2-1, A4-2, A4-3, A5-1, A5-2, A5-3, A6-1, A6-2, A6-3, B1-1, B2-1, B2-2, B3-1, B3-2, B3-3, C1-1, C1-2, C1-3, C2-1, C2-2, C3-1, C3-2, C3-3, C3-4, C1-1, C1-2, C1-3, C1-4, C2-1, C2-2, C3-1, C3-2, C3-3, C3-4, C4-1, C4-2, D1-1, D1-2, D1-3, D2-1, D2-2, D3-1, D3-2, D3-3, D4-1, D4-2, D5-1, D5-2, D6-1, D6-2, D6-3, D7-1, D7-2, D7-3, E1-1, E1-2, E1-3, E2-1, E2-2, E2-3, E3-2, E3-3, E5-1, E5-2</td>
</tr>
<tr>
<td>3. Regulation and behavior</td>
<td>A3-2, B1-1, B5-1, B5-2, C1-1, C1-2, C1-3, C1-4, C2-1, C2-2, C2-3, C2-4, C3-1, C3-2, C3-3, C3-4, C4-1, C4-2, C5-1, C5-2, D1-3, D2-2, D3-1, D3-2, D3-3, D4-1, D4-2, D5-1, D5-2, D6-1, D6-2, D6-3, D7-1, D7-2, D7-3, E1-1, E1-2, E1-3, E2-1, E2-2, E2-3, E3-2, E3-3, E5-1, E5-2</td>
</tr>
<tr>
<td>4. Populations and ecosystems</td>
<td>A1-2, A3-3, B1-2, C2-1, C2-2, C3-1, C3-2, C3-3, C3-4, C4-1, C4-2, C5-1, C5-2, D7-1, D7-2, D7-3, E3-2, E3-3, E5-1, E5-2</td>
</tr>
<tr>
<td>5. Diversity and adaptations of organisms</td>
<td>A6-1, A6-2, A6-3, B1-1, B2-1, B2-2, B3-1, B3-2, B3-3, B4-2, B4-3, C1-1, C1-2, C1-3, C2-1, C2-2, C2-3, C2-4, C3-1, C3-2, C3-3, C3-4, C4-1, C4-2, C5-1, C5-2, D7-1, D7-2, D7-3, E3-2, E3-3, E5-1, E5-2</td>
</tr>
<tr>
<td><strong>(D) Earth and Space Science</strong></td>
<td></td>
</tr>
<tr>
<td>1. Structure of the Earth system</td>
<td>E2-1, E2-2, E2-3</td>
</tr>
<tr>
<td>2. Earth’s history</td>
<td>A1-3, A6-1, A6-2</td>
</tr>
<tr>
<td>3. Earth in the solar system</td>
<td>E2-3</td>
</tr>
<tr>
<td>Objectives</td>
<td>Book, Chapter, and Section</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td><strong>(E) Science and Technology</strong></td>
<td></td>
</tr>
<tr>
<td>1. Abilities of technological design</td>
<td>A5-3, D7-3</td>
</tr>
<tr>
<td>2. Understandings about science and technology</td>
<td>A2-3, A4-3, A5-3, B3-3, B4-3, D2-2, D7-3, E4-2, E4-3</td>
</tr>
<tr>
<td><strong>(F) Science in Personal and Social Perspectives</strong></td>
<td></td>
</tr>
<tr>
<td>1. Personal Health</td>
<td>A2-3, A5-2, B1-2, C1-3, D1-2, D1-3, D2-1, D2-2, D3-2, D3-3, D4-1, D4-2, D6-2, D6-3, D7-1, D7-2, D7-3, E4-2</td>
</tr>
<tr>
<td>2. Populations, resources, and environments</td>
<td>C1-2, C2-1, C2-2, C2-4, C4-2, E2-1, E2-2, E2-3, E3-1, E3-1, E3-3, E4-1, E4-2, E4-3, E5-1, E5-2</td>
</tr>
<tr>
<td>3. Natural hazards</td>
<td>E3-1</td>
</tr>
<tr>
<td>4. Risks and benefits</td>
<td>B3-2, D7-3, E4-1, E4-2, E4-3</td>
</tr>
<tr>
<td>5. Science and technology in society</td>
<td>A1-4, A4-3, A5-3, B1-2, B2-2, B3-3, B4-3, C3-4, E1-3, E4-1, E4-2, E4-3, E5-1, E5-2</td>
</tr>
<tr>
<td><strong>(G) History and Nature of Science</strong></td>
<td></td>
</tr>
<tr>
<td>1. Science as a human endeavor</td>
<td>A1-1, A3-3, A4-3, A5-3, A6-1, A6-3, B2-2, B5-2, C2-4, C4-2, C5-2, D5-2, D7-3, E1-3, E3-3, E4-3</td>
</tr>
<tr>
<td>3. History of science</td>
<td>A1-3, A1-4, A2-3, A5-1, A6-1, A6-2, A6-3, C1-3, C4-2, C5-1, D1-3, D3-3, D4-2, D7-2, E1-3</td>
</tr>
</tbody>
</table>
Section 1  •  What are bacteria?

Schedule
Block Schedule: 1 session  ■ denotes activities recommended for block schedule.
Single Periods: 2 sessions

Objectives
1. Identify the characteristics of bacteria cells.
2. Compare and contrast aerobic and anaerobic organisms.

National Content Standards
UCP5, A1, C1, C2, C3, C5

Motivate
■ Before You Read, p. 7 (Foldables, p. 13, CRB)
■ Section Focus Transparency 1, TCR (Transparency Master and Study Guide, p. 38, CRB)

Teach
■ Content Background, pp. 6E–6F, TWE
■ Visual Learning, pp. 9, 11, TWE
■ MiniLAB: Modeling Bacteria Size, p. 9 (MiniLAB Worksheet, p. 3, CRB)
■ Discussion, p. 10, TWE
■ Science Online, p. 11
■ Use Science Words, p. 11, TWE
■ Inclusion Strategies, p. 12, TWE
■ Earth Science Integration, p. 12
■ Activity, p. 12, TWE
■ Quick Demo, p. 12, TWE
■ Activity: Observing Cyanobacteria, p. 14 (Activity Worksheet, pp. 5–6, CRB)
■ Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 27–28, CRB)
■ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 41–43, CRB)
■ Laboratory Activity 1, pp. 9–10, CRB
■ Home and Community Involvement, p. 37, TCR
■ Spanish Resources, Section 1, CRB

Assess
■ Section Assessment, p. 13
■ Skill Builder Activities, p. 13
■ Performance Assessment in the Science Classroom, pp. 89, 127, TCR

Reteach/Reinforce
■ Directed Reading for Content Mastery, pp. 15, 16, CRB
■ Spanish Directed Reading for Content Mastery, pp. 19, 20, CRB
■ Reinforcement, p. 23, CRB

Enrich/Apply
■ Enrichment, p. 25, CRB
■ Life Science Critical Thinking/Problem-Solving, p. 1, TCR

Multimedia Options
■ Vocabulary Puzzlemaker Software, Ch. 1
■ Guided Reading Audio Program (English & Spanish), Ch. 1
■ Interactive CD-ROM, Presentation Builder, Ch. 1
Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition, CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources
Section 2  •  Bacteria in Your Life

Schedule
Block Schedule:  1.5 sessions  (■ denotes activities recommended for block schedule.)
Single Periods:  3 sessions

Objectives
3. Identify some ways bacteria are helpful.  
4. Determine the importance of nitrogen-fixing bacteria.  
5. Explain how some bacteria can cause human disease.

National Content Standards
UCP2, A1, C4, F1, F5, G2

Motivate
■ Section Focus Transparency 2, TCR (Transparency Master and Study Guide, p. 39, CRB)

Teach
■ MiniLAB: Observing Bacterial Growth, p. 16 (MiniLAB Worksheet, p. 4, CRB)
■ Visual Learning, pp. 17, 18, TWE  
■ Activity, pp. 17, 24, TWE  
■ Chemistry Integration, p. 18  
■ Science Online, p. 19  
■ Discussion, pp. 19, 24, TWE  
■ Quick Demo, p. 19, TWE

Assess
■ Section Assessment, p. 21  
■ Skill Builder Activities, p. 21  
■ Performance Assessment in the Science Classroom, pp. 93, 105, 145, 157, 161, TCR

Reteach/Reinforce
■ Directed Reading for Content Mastery, pp. 17, 18, CRB  
■ Spanish Directed Reading for Content Mastery, pp. 21, 22, CRB  
■ Reinforcement, p. 24, CRB  
■ Mathematics Skill Activities, p. 19, TCR  
■ Reading and Writing Skill Activities, p. 25, TCR

Enrich/Apply
■ Enrichment, p. 26, CRB

Chapter Assessment
■ Chapter Study Guide, pp. 26–27  
■ Chapter Review, pp. 31–32, CRB  
■ Chapter Assessment, pp. 28–29  
■ Chapter Test, pp. 33–36, CRB

Assessment Transparency, TCR, (Transparency Master and Study Guide, p. 44, CRB)
■ Standardized Practice by The Princeton Review, pp. 11–14, TCR

Multimedia Options
■ Vocabulary Puzzlemaker Software, Ch. 1  
■ Guided Reading Audio Program (English & Spanish), Ch. 1  
■ MindJogger Videoquiz, Ch. 1  
■ ExamView Pro Test Bank Software, Ch. 1  
■ Interactive CD-ROM, Exploration and Quiz, Ch. 1  
■ Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition,
CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources
Lesson Plans

Section 1  •  Protists

Schedule
Block Schedule:  1.5 sessions  (denotes activities recommended for block schedule.)
Single Periods:  3 sessions

Objectives
1. Describe the characteristics shared by all protists.
2. Compare and contrast the three groups of protists.
3. List examples of each of the three protist groups.
4. Explain why protists are so difficult to classify.

National Content Standards
UCP1, UCP5, A1, C1, C5

Motivate
_____ Explore Activity, p. 31
_____ Before You Read, p. 31 (Foldables, p. 15, CRB)
■■ Section Focus Transparency 1, TCR (Transparency Master and Study Guide, p. 40, CRB)

Teach
_____ Content Background, pp. 30E–30F, TWE
_____ Visual Learning, pp. 33, 34, 35, TWE
_____ Science Online, p. 36
_____ Discussion, pp. 38, 41, TWE
_____ Health Integration, p. 39
_____ MiniLAB: Observing Slime Molds, p. 40 (MiniLAB Worksheet, p. 3, CRB)
_____ Problem-Solving Activity, p. 41
_____ Math Skills Activity, p. 41
■■ Activity: Comparing Algae and Protozoans, p. 43 (Activity Worksheet, pp. 5–6, CRB)
_____ Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 29–30, CRB)
_____ Science Inquiry Lab, p. 3, TCR
■■ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 43–44, CRB)
_____ Spanish Resources, Section 1, CRB

Assess
■■ Section Assessment, p. 42
_____ Skill Builder Activities, p. 42
_____ Performance Assessment in the Science Classroom, pp. 59, 93, 97, 121, 175, TCR

Reteach/Reinforce
■■ Directed Reading for Content Mastery, pp. 17, 18, CRB
_____ Spanish Directed Reading for Content Mastery, pp. 21, 22, CRB
_____ Reinforcement, p. 25, CRB

Enrich/Apply
_____ Enrichment, p. 27, CRB
_____ Life Science Critical Thinking/Problem-Solving, p. 1, TCR
_____ Cultural Diversity, p. 3, TCR

Multimedia Options
_____ Vocabulary Puzzlemaker Software, Ch. 2
_____ Guided Reading Audio Program (English & Spanish), Ch. 2
_____ Interactive CD-ROM, Presentation Builder and Exploration, Ch. 2
_____ Science Web site: science.glencoe.com
### Section 2: Fungi

#### Schedule
Block Schedule: 2 sessions (denotes activities recommended for block schedule.)
Single Periods: 4 sessions

#### Objectives
5. Identify the characteristics shared by all fungi.
6. Classify fungi into groups based on their methods of reproduction.
7. Differentiate between the imperfect fungi and all other fungi.

#### National Content Standards
UCP1, UCP5, A1, C1, C2, C5, F5, G1

#### Motivate
- Section Focus Transparency 2, TCR (Transparency Master and Study Guide, p. 41, CRB)

#### Teach
- Science Online, p. 45
- Discussion, pp. 45, 55, TWE
- MiniLAB: Interpreting Spore Prints, p. 47 (MiniLAB Worksheet, p. 4, CRB)
- Environmental Science Integration, p. 50
- Earth Science Integration, p. 50
- Activity: Creating a Fungus Field Guide, pp. 52–53 (Activity Worksheet, pp. 7–8, CRB)
- Science and Society, pp. 54–55
- Content Outline for Teaching, Section 2 (Note-taking Worksheet, pp. 29–30, CRB)
- Laboratory Activity 1, pp. 9–10, CRB
- Laboratory Activity 2, pp. 11–13, CRB
- Home and Community Involvement, p. 43, TCR
- Spanish Resources, Section 2, CRB

#### Assess
- Section Assessment, p. 51
- Skill Builder Activities, p. 51
- Performance Assessment in the Science Classroom, pp. 127, 143, 145, 157, TCR

#### Reteach/Reinforce
- Directed Reading for Content Mastery, pp. 19, 20, CRB
- Spanish Directed Reading for Content Mastery, pp. 23, 24, CRB
- Reinforcement, p. 26, CRB
- Mathematics Skill Activities, p. 5, TCR
- Reading and Writing Skill Activities, p. 37, TCR

#### Enrich/Apply
- Enrichment, p. 28, CRB

#### Chapter Assessment
- Chapter Study Guide, pp. 56–57
- Chapter Review, pp. 33–34, CRB
- Chapter Assessment, pp. 58–59
- Chapter Test, pp. 35–38, CRB
- Assessment Transparency, TCR, (Transparency Master and Study Guide, p. 45, CRB)
- Standardized Practice by The Princeton Review, pp. 15–18, TCR

#### Multimedia Options
- Vocabulary Puzzlemaker Software, Ch. 2
- Guided Reading Audio Program (English & Spanish), Ch. 2
- MindJogger Videoquiz, Ch. 2
- ExamView Pro Test Bank Software, Ch. 2
- Interactive CD-ROM, Quiz, Ch. 2
- Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition,
CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources
### Section 1 - An Overview of Plants

#### Schedule
Block Schedule: 1 session  (denotes activities recommended for block schedule.)
Single Periods: 2 sessions

#### Objectives

1. **Identify** characteristics common to all plants.
2. **Explain** which plant adaptations make it possible for plants to survive on land.
3. **Compare and contrast** vascular and nonvascular plants.

#### National Content Standards
UCP1, C1, C5

#### Motivate
- Explore Activity, p. 61
- Before You Read, p. 61 (Foldables, p. 13, CRB)
- Section Focus Transparency 1, TCR (Transparency Master and Study Guide, p. 40, CRB)

#### Teach
- Content Background, pp. 60E–60F, TWE
- Science Journal, p. 60, TWE
- Visual Learning, pp. 63, 66, TWE
- Inclusion Strategies, p. 63, TWE
- Chemistry Integration, p. 64
- Activity, pp. 64, 65, 66, TWE
- Quick Demo, p. 64, TWE
- Lab Demonstration, p. 65, TWE
- Use Science Words, p. 65, TWE
- Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 29–31, CRB)
- Spanish Resources, Section 1, CRB

#### Assess
- Section Assessment, p. 67
- Skill Builder Activities, p. 67
- Performance Assessment in the Science Classroom, pp. 55, 89, 91, TCR

#### Reteach/Reinforce
- Directed Reading for Content Mastery, pp. 15, 16, CRB
- Spanish Directed Reading for Content Mastery, pp. 19, 20, CRB
- Reinforcement, p. 23, CRB

#### Enrich/Apply
- Enrichment, p. 26, CRB
- Life Science Critical Thinking/Problem-Solving, p. 9, TCR
- Earth Science Critical Thinking/Problem-Solving, p. 17, TCR
- Cultural Diversity, p. 19, TCR

#### Multimedia Options
- Vocabulary Puzzlemaker Software, Ch. 3
- Guided Reading Audio Program (English & Spanish), Ch. 3
- Interactive CD-ROM, Presentation Builder, Ch. 3
- Using the Internet in the Science Classroom, TCR
- Science Web site: science.glencoe.com
### Section 2 - Seedless Plants

**Schedule**
Block Schedule: 1 session  
Single Periods: 2 sessions

**Objectives**

4. **Distinguish** between characteristics of seedless nonvascular plants and seedless vascular plants.

5. **Identify** the importance of some nonvascular and vascular plants.

**National Content Standards**

UCP5, A1, C1, C5, F4

**Motivate**

- Section Focus Transparency 2, **TCR** (Transparency Master and Study Guide, p. 41, **CRB**)

**Teach**

- Curriculum Connection, p. 69, **TWE**
- MiniLAB: Measuring Water Absorption by a Moss, p. 69 (MiniLAB Worksheet, p. 3, **CRB**)
- Science Online, p. 70
- Problem-Solving Activity, p. 70
- Quick Demo, pp. 70, 72, **TWE**
- Inclusion Strategies, p. 70, **TWE**
- Extension, p. 70, **TWE**
- Make a Model, p. 71, **TWE**
- Discussion, p. 72, **TWE**
- Visual Learning, p. 72, **TWE**
- Use Science Words, p. 72, **TWE**
- Content Outline for Teaching, Section 2 (Note-taking Worksheet, pp. 29–31, **CRB**)
- Home and Community Involvement, p. 42, **TCR**
- Spanish Resources, Section 2, **CRB**

**Assess**

- Section Assessment, p. 73
- Skill Builder Activities, p. 73
- Performance Assessment in the Science Classroom, pp. 95, 143, **TCR**

**Reteach/Reinforce**

- Directed Reading for Content Mastery, p. 17, **CRB**
- Spanish Directed Reading for Content Mastery, p. 21, **CRB**
- Reinforcement, p. 24, **CRB**
- Mathematics Skill Activities, p. 5, **TCR**

**Enrich/Apply**

- Enrichment, p. 27, **CRB**

**Multimedia Options**

- Vocabulary Puzzlemaker Software, Ch. 3
- Guided Reading Audio Program (English & Spanish), Ch. 3
- Using the Internet in the Science Classroom, **TCR**
- Science Web site: science.glencoe.com

---

**Copyright © Glencoe/McGraw-Hill, a division of the McGraw-Hill Companies, Inc.**

---

**TWE = Teacher Wraparound Edition,**  
**CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources**
Section 3 • Seed Plants

Schedule
Block Schedule: 1.5 sessions (denotes activities recommended for block schedule.)
Single Periods: 3 sessions

Objectives
6. Identify the characteristics of seed plants.
7. Explain the structures and functions of roots, stems, and leaves.
8. Describe the main characteristics and importance of
gymnosperms and angiosperms.
9. Compare similarities and differences between monocots and dicots.

National Content Standards
UCP5, A1, C1, C5, E2, F5, G2

Motivate
■ Section Focus Transparency 3, TCR (Transparency Master and Study Guide, p. 42, CRB)

Teach
■ MiniLAB: Observing Water Moving in a Plant, p. 75 (MiniLAB Worksheet, p. 4, CRB)
■ Visual Learning, p. 76, TWE
■ Health Integration, p. 77
■ Science Online, p. 81
■ Activity: Identifying Conifers, p. 83 (Activity Worksheet, pp. 5–6, CRB)
■ Activity: Plants as Medicine, pp. 84–85 (Activity Worksheet, pp. 7–8, CRB)
■ Oops! Accidents in Science, pp. 86–87
■ Content Outline for Teaching, Section 3 (Note-taking Worksheet, pp. 29–31, CRB)
■ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 43–44, CRB)
■ Laboratory Activity 1, pp. 9–10, CRB
■ Laboratory Activity 2, pp. 11–12, CRB
■ Spanish Resources, Section 3, CRB

Assess
■ Section Assessment, p. 82
■ Skill Builder Activities, p. 82
■ Performance Assessment in the Science Classroom, pp. 61, 89, 121, 129, 157, TCR

Reteach/Reinforce
■ Directed Reading for Content Mastery, pp. 17, 18, CRB
■ Spanish Directed Reading for Content Mastery, pp. 21, 22, CRB
■ Reinforcement, p. 25, CRB

Enrich/Apply
■ Enrichment, p. 28, CRB

Chapter Assessment
■ Chapter Study Guide, pp. 88–89
■ Chapter Review, pp. 33–34, CRB
■ Chapter Assessment, pp. 90–91
■ Chapter Test, pp. 35–38, CRB
■ Assessment Transparency, TCR, (Transparency Master and Study Guide, p. 45, CRB)
■ Standardized Test Practice by The Princeton Review, pp. 19–22, TCR

Multimedia Options
■ Vocabulary Puzzlemaker Software, Ch. 3
■ Guided Reading Audio Program (English & Spanish), Ch. 3
■ Mindjogger Videoquiz, Ch. 3
■ ExamView Pro Test Bank Software, Ch. 3
■ Interactive CD-ROM, Exploration and Quiz, Ch. 3
■ Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition,
CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources

Plants 7
# Section 1 - Introduction to Plant Reproduction

## Schedule

Block Schedule: 1 session (denotes activities recommended for block schedule.)

Single Periods: 2 sessions

## Objectives

1. **Distinguish** between the two types of plant reproduction.
2. **Describe** the two stages in a plant’s life cycle.

## National Content Standards

UCP3, A1, C1, C2

## Motivate

- Explore Activity, p. 93
- Before You Read, p. 93 (Foldables, p. 15, CRB)
- Section Focus Transparency 1, TCR (Transparency Master and Study Guide, p. 42, CRB)

## Teach

- Content Background, pp. 92E–92F, TWE
- Science Journal, p. 92, TWE
- Quick Demo, p. 95, TWE
- Extension, pp. 95, 96, TWE
- Teacher FYI, p. 95, TWE
- MiniLAB: Observing Asexual Reproduction, p. 95 (MiniLAB Worksheet, p. 3, CRB)
- Science Online, p. 96
- Visual Learning, p. 96, TWE
- Use Science Words, p. 96, TWE
- Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 31–33, CRB)
- Spanish Resources, Section 1, CRB

## Assess

- Section Assessment, p. 97
- Skill Builder Activities, p. 97
- Performance Assessment in the Science Classroom, pp. 97, 121, 151, TCR

## Reteach/Reinforce

- Directed Reading for Content Mastery, pp. 17, 18, CRB
- Spanish Directed Reading for Content Mastery, pp. 21, 22, CRB
- Reinforcement, p. 25, CRB

## Enrich/Apply

- Enrichment, p. 28, CRB
- Cultural Diversity, p. 19, TCR

## Multimedia Options

- Vocabulary Puzzlemaker Software, Ch. 4
- Guided Reading Audio Program (English & Spanish), Ch. 4
- Interactive CD-ROM, Presentation Builder, Ch. 4
- Using the Internet in the Science Classroom, TCR
- Science Web site: science.glencoe.com

---

TWE = Teacher Wraparound Edition, CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources

8 Plant Reproduction
Section 2 • Seedless Reproduction

Schedule
Block Schedule: 1 session ( ■ denotes activities recommended for block schedule.)
Single Periods: 2 sessions

Objectives
3. Examine the life cycle of a moss and a fern.
4. Explain why spores are important to seedless plants.
5. Identify some special structures used by ferns for reproduction.

National Content Standards
UCP5, A1, C1, C2, C5

Motivate
■ Section Focus Transparency 2, TCR (Transparency Master and Study Guide, p. 43, CRB)

Teach
_____ Discussion, pp. 99, 100, TWE
_____ Visual Learning, pp. 99, 100, 101, TWE
_____ Activity, p. 99, TWE
_____ Curriculum Connection, p. 99, TWE
_____ Teacher FYI, p. 99, TWE
_____ Physics Integration, p. 100
_____ Science Journal, p. 100, TWE
_____ Make a Model, p. 100, TWE
■ Activity: Comparing Seedless Plants, p. 102 (Activity Worksheet, pp. 5–6, CRB)
_____ Content Outline for Teaching, Section 2 (Note-taking Worksheet, pp. 31–33, CRB)
■ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 45–46, CRB)
____ Spanish Resources, Section 2, CRB

Assess
■ Section Assessment, p. 101
_____ Skill Builder Activities, p. 101
_____ Performance Assessment in the Science Classroom, pp. 89, 123, TCR

Reteach/Reinforce
■ Directed Reading for Content Mastery, p. 18, CRB
_____ Spanish Directed Reading for Content Mastery, p. 22, CRB
_____ Reinforcement, p. 26, CRB

Enrich/Apply
_____ Enrichment, p. 29, CRB

Multimedia Options
_____ Vocabulary Puzzlemaker Software, Ch. 4
_____ Guided Reading Audio Program (English & Spanish), Ch. 4
_____ Using the Internet in the Science Classroom, TCR
_____ Science Web site: science.glencoe.com

TWE = Teacher Wraparound Edition,
CRB = Chapter Resources Booklet, TCR = Teacher Classroom Resources
### Section 3  
**Seed Reproduction**

**Schedule**
- **Block Schedule:** 1.5 sessions *( denotes activities recommended for block schedule.)
- **Single Periods:** 3 sessions

**Objectives**
1. Examine the life cycles of typical gymnosperms and angiosperms.
2. Describe the structure and function of the flower.
3. Discuss methods of seed dispersal in seed plants.

**National Content Standards**
- UCP5, A1, C1, C2, C5, E2, F5

---

### Motivate
- **Section Focus Transparency 3, TCR** *(Transparency Master and Study Guide, p. 44, CRB)*

### Teach
- **Science Online, p. 104**
- **Environmental Science Integration, p. 106**
- **MiniLAB: Modeling Seed Dispersal, p. 110** *(MiniLAB Worksheet, p. 4, CRB)*
- **Math Skills Activity, p. 112**
- **Discussion, pp. 112, 117, TWE**
- **Activity: Germination Rate of Seeds, pp. 114–115** *(Activity Worksheet, pp. 7–8, CRB)*

### Assess
- **Section Assessment, p. 113**
- **Skill Builder Activities, p. 113**
- **Science and Society, pp. 116–117**
- **Content Outline for Teaching, Section 3** *(Note-taking Worksheet, pp. 31–33, CRB)*
- **Science Inquiry Lab, pp. 7, 13, TCR**
- **Laboratory Activity 1, pp. 9–12, CRB**
- **Laboratory Activity 2, pp. 13–14, CRB**
- **Home and Community Involvement, p. 41, TCR**
- **Spanish Resources, Section 3, CRB**

### Reteach/Reinforce
- **Directed Reading for Content Mastery, pp. 19, 20, CRB**
- **Spanish Directed Reading for Content Mastery, pp. 23, 24, CRB**
- **Reinforcement, p. 27, CRB**
- **Mathematics Skill Activities, p. 5, TCR**
- **Reading and Writing Skill Activities, p. 1, TCR**

### Enrich/Apply
- **Enrichment, p. 30, CRB**
- **Earth Science Critical Thinking/Problem-Solving, p. 7, TCR**

### Chapter Assessment
- **Chapter Study Guide, pp. 118–119**
- **Chapter Review, pp. 35–36, CRB**
- **Chapter Assessment, pp. 120–121**
- **Chapter Test, pp. 37–40, CRB**
- **Assessment Transparency, TCR, (Transparency Master and Study Guide, p. 47, CRB)**
- **Standardized Test Practice by The Princeton Review, pp. 23–26, TCR**

### Multimedia Options
- **Vocabulary Puzzlemaker Software, Ch. 4**
- **Guided Reading Audio Program (English & Spanish), Ch. 4**
- **MindJogger Videoquiz, Ch. 4**
- **ExamView Pro Test Bank Software, Ch. 4**
- **Interactive CD-ROM, Exploration and Quiz, Ch. 4**
- **Science Web site: science.glencoe.com**
Section 1  •  Photosynthesis and Respiration

Schedule
Block Schedule:  1 session  (denotes activities recommended for block schedule.)
Single Periods:  2 sessions

Objectives
1. Explain how plants take in and give off gases.
2. Compare and contrast relationships between photosynthesis and respiration.
3. Discuss why photosynthesis and respiration are important.

National Content Standards
UCP1, A1, C1, C3

Motivate
____ Explore Activity, p. 123
____ Before You Read, p. 123 (Foldables, p. 15, CRB)
____ Section Focus Transparency 1, TCR (Transparency Master and Study Guide, p. 40, CRB)

Teach
____ Content Background, pp. 122E–122F, TWE
____ Health Integration, p. 125
____ Visual Learning, pp. 125, 130, TWE
____ MiniLAB: Inferring What Plants Need to Produce Chlorophyll, p. 127 (MiniLAB Worksheet, p. 3, CRB)
____ Science Online, p. 128
____ Discussion, p. 129, TWE
____ Activity, p. 131, TWE
____ Activity: Stomata in Leaves, p. 132 (Activity Worksheet, pp. 5–6, CRB)
____ Content Outline for Teaching, Section 1 (Note-taking Worksheet, pp. 29–31, CRB)
____ Science Inquiry Lab, p. 35, TCR
____ Teaching Transparency, TCR (Transparency Master and Study Guide, pp. 43–44, CRB)
____ Laboratory Activity 1, pp. 9–10, CRB
____ Spanish Resources, Section 1, CRB

Assess
____ Section Assessment, p. 131
____ Skill Builder Activities, p. 131
____ Performance Assessment in the Science Classroom, pp. 99, 123, 127, TCR

Reteach/Reinforce
____ Directed Reading for Content Mastery, pp. 17, 18, CRB
____ Spanish Directed Reading for Content Mastery, pp. 21, 22, CRB
____ Reinforcement, p. 25, CRB

Enrich/Apply
____ Enrichment, p. 27, CRB
____ Life Science Critical Thinking/Problem-Solving, p. 8, TCR

Multimedia Options
____ Vocabulary Puzzlemaker Software, Ch. 5
____ Guided Reading Audio Program (English & Spanish), Ch. 5
____ Interactive CD-ROM, Presentation Builder, Ch. 5
____ Using the Internet in the Science Classroom, TCR
____ Science Web site: science.glencoe.com
### Section 2  •  Plant Responses

#### Schedule
Block Schedule: 1.5 sessions  ( ■ denotes activities recommended for block schedule.)
Single Periods:  3 sessions

#### Objectives
4. **Identify** the relationship between a stimulus and a tropism in plants.
5. **Compare and contrast** long-day and short-day plants.
6. **Explain** how plant hormones and responses are related.

#### National Content Standards
UCP1, A1, C1, C3, G1

#### Motivate
- Section Focus Transparency 2, **TCR** (Transparency Master and Study Guide, p. 41, **CRB**)

#### Teach
- Physics Integration, p. 134
- Discussion, pp. 134, 135, **TWE**
- Math Skills Activity, p. 135
- MiniLAB: Observing Ripening, p. 136
  (MiniLAB Worksheet, p. 4, **CRB**)
- Science Online, p. 138
- Activity: Tropism in Plants, pp. 140–141
  (Activity Worksheet, pp. 7–8, **CRB**)

#### Assess
- Section Assessment, p. 139
- Skill Builder Activities, p. 139
- Performance Assessment in the Science Classroom, pp. 61, 133, 143, 145, **TCR**

#### Reteach/Reinforce
- Directed Reading for Content Mastery, pp. 19, 20, **CRB**
- Spanish Directed Reading for Content Mastery, pp. 23, 24, **CRB**
- Reinforcement, p. 26, **CRB**
- Mathematics Skill Activities, p. 25, **TCR**

#### Enrich/Apply
- Enrichment, p. 28, **CRB**

#### Chapter Assessment
- Chapter Study Guide, pp. 144–145
- Chapter Review, pp. 33–34, **CRB**
- Chapter Assessment, pp. 146–147
- Chapter Test, pp. 35–38, **CRB**
- Assessment Transparency, **TCR**, (Transparency Master and Study Guide, p. 45, **CRB**)
- Standardized Test Practice by The Princeton Review, pp. 27–30, **TCR**

#### Multimedia Options
- Vocabulary Puzzlemaker Software, Ch. 5
- Guided Reading Audio Program (English & Spanish), Ch. 5
- MindJogger Videoquiz, Ch. 5
- ExamView Pro Test Bank Software, Ch. 5
- Interactive CD-ROM, Exploration and Quiz, Ch. 5
- Science Web site: science.glencoe.com