

Plant Structure and Function

Chapter Pacing Guide

Please note that this pace is based on completing selected sections of the text in 90 classes, approximately 90 minutes each. Less time can be allotted for each chapter if you plan to teach the entire text.

Block	Content
0.5	23.1 Plant Cells and Tissues
1	23.2 Roots, Stems, and Leaves
0.5	23.3 Plant Responses
0.5	Chapter Assessment

Block Schedule Planning Guide

23.1

Plant Cells and Tissues

pages 605–611

Pacing Guide

1/2 block

Lesson & MiniLab

KEY: *SE* = Student Edition, *TWE* = Teacher Wraparound Edition, *TCR* = Teacher Classroom Resources, *BDOL* = Biology: The Dynamics of Life, *URB* = Unit Resources Booklet

National Science Content Standards: UCP.1, UCP.2, UCP.5; A.1, A.2; C.1, C.5; F.3

Objectives

- **Identify** the major types of plant cells.
- **Distinguish** among the functions of the different types of plant tissues.

State/local objectives: _____

Lesson Resources

- _____ Section Focus Transparency 55 and Master, *TCR/URB*
- _____ *MiniLab Worksheet*, p. 63 *URB*
- _____ *BioLab Worksheet*, p. 65–66 *URB*
- _____ *Concept Mapping*, p. 75 *URB*
- _____ *Reinforcement and Study Guide*, *URB* English, p. 67; Spanish, p. 71
- _____ Reteaching Skills Transparency 32 and Master, *TCR/URB*

Multimedia Resources

- _____ **Interactive Chalkboard CD-ROM:** Section 23.1 Presentation
- _____ **MindJogger Videoquizzes**, Ch. 23
- _____ **Guided Reading Audio Summaries MP3** *Using the Internet in the Science Classroom*, *TCR*
- _____ Glencoe Science Web site: bdol.glencoe.com

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Distribute the corrected Chapter 22 tests while students complete the Bellringer for Section 23.1. 	Section Focus Transparency 55 and Master, <i>TCR/URB</i>	5 minutes
Discussion <ul style="list-style-type: none"> • Answer Chapter 22 test questions. 	<i>Chapter Assessment</i> , pp. 165–166 <i>URB</i>	5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Chapter 23 with the Two-Minute Chapter Launcher. • Teach the main concepts of Section 23.1. • Use the Teaching Strategies to discuss the Inside Story. • Have students complete MiniLab 23.1. 	<i>TWE</i> , p. 604 <i>TWE</i> , pp. 605–611 <i>TWE</i> , p. 609 <i>SE</i> , p. 608	20 minutes
In-Class Check <ul style="list-style-type: none"> • Discuss the MiniLab and assess students' results. • Review Section 23.1 concepts with the Reteaching Skills Transparency. 	<i>TWE</i> , p. 608 Reteaching Skills Transparency 32 and Master, <i>TCR/URB</i>	5 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 23.1 Assessment. • Assign the Problem-Solving Lab 23.1. Instruct students to answer the Thinking Critically questions in their journals. • Assign relevant questions from Chapter 23 Assessment. 	<i>SE</i> , p. 611 <i>SE</i> , p. 611 <i>SE</i> , pp. 629–631	5 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Extension activity. 	<i>TWE</i> , p. 611	5 minutes

[total = 45 minutes]

Block Schedule Planning Guide

23.2

Roots, Stems, and Leaves

pages 612–621

National Science Content Standards: UCP.1, UCP.2, UCP.5; A.1, A.2; C.1, C.4–6

Pacing Guide

1 block

Lesson & MiniLab

KEY: SE = Student Edition, TWE = Teacher Wraparound Edition, TCR = Teacher Classroom Resources, BDOL = Biology: The Dynamics of Life, URB = Unit Resources Booklet

Objectives

- Identify and compare the structures of roots, stems, and leaves.
- Describe and compare the functions of roots, stems and leaves.

State/local objectives: _____

Lesson Resources

- _____ Section Focus Transparency 56 and Master, *TCR/URB*
- _____ Basic Concepts Transparencies 36–37 and Master, *TCR/URB*
- _____ *BioLab and MiniLab Worksheets*, p. 106 *URB*
- _____ *Reinforcement and Study Guide*, *URB* English, pp. 68–69; Spanish, pp. 72–73
- _____ Reteaching Skills Transparencies 33–34 and Master, *TCR/URB*

- _____ *MindJogger Videoquizzes*, Ch. 23
- _____ **Guided Reading Audio Summaries MP3**
- _____ **Virtual Labs CD-ROM**
Virtual Lab: *Plant Transpiration*
- _____ *Using the Internet in the Science Classroom*, *TCR*
- _____ Glencoe Science Web site: bdol.glencoe.com

Optional Resources

- _____ *Laboratory Manual*, pp. 141–146, 147–150 *TCR*
- _____ *Critical Thinking/Problem Solving*, p. 76 *URB*

Multimedia Resources

- _____ **Interactive Chalkboard CD-ROM:**
Section 23.2 Presentation

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students complete the Bellringer for Section 23.2. • Have students check homework answers. 	Section Focus Transparency 56 and Master, <i>TCR/URB</i> <i>TWE</i> , pp. 611, 629–631	10 minutes
Discussion <ul style="list-style-type: none"> • Answer homework questions. 	<i>TWE</i> , pp. 611, 629–631	5 minutes
Core Lesson <ul style="list-style-type: none"> • Teach the main concepts of Section 23.2. • Have students complete MiniLab 23.2 	<i>TWE</i> , pp. 612–621 <i>SE</i> , p. 620	25 minutes
In-Class Check <ul style="list-style-type: none"> • Have students complete Problem-Solving Lab 23.2 • Review Section 23.2 concepts with the Reteaching Skills Transparencies. 	<i>SE</i> , p. 619 Reteaching Skills Transparencies 33–34 and Master, <i>TCR/URB</i>	10 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 23.2 Assessment. • Assign relevant questions from Chapter 23 Assessment. 	<i>SE</i> , p. 621 <i>SE</i> , pp. 629–631	30 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Extension activity. 	<i>TWE</i> , p. 621	10 minutes

[total = 45 minutes]

Block Schedule Planning Guide

23.3

Plant Responses

pages 622–625

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

Pacing Guide

1/2 block

Lesson & BioLab

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Objectives

- Identify the major types of plant hormones.
- Identify and analyze the different types of plant responses.

State/local objectives: _____

Lesson Resources

_____ Section Focus Transparency 57 and Master, *TCR/URB*
 _____ *Reinforcement and Study Guide, URB*
 English, p. 70; Spanish, p. 74

_____ *MindJogger Videoquizzes*, Ch. 23
 _____ **Guided Reading Audio Summaries MP3**
 _____ *Using the Internet in the Science Classroom, TCR*
 _____ Glencoe Science Web site: bdol.glencoe.com

Multimedia Resources

_____ **Interactive Chalkboard CD-ROM:**
 Section 23.3 Presentation

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students complete the Bellringer for Section 23.3. • Have students check homework answers. 	Section Focus Transparency 56 and Master, <i>TCR/URB</i> <i>TWE</i> , pp. 621, 629–631	5 minutes
Discussion <ul style="list-style-type: none"> • Answer homework questions. 	<i>TWE</i> , pp. 621, 629–631	5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce section 23.3 with the Quick Demo. • Teach the main concepts of Section 23.3. • Have students complete BioLab. 	<i>TWE</i> , p. 623 <i>TWE</i> , pp. 622–625 <i>SE</i> , pp. 626–627	20 minutes
In-Class Check <ul style="list-style-type: none"> • Discuss the BioLab and assess students' results. • Do the Check for Understanding and Reteach Strategies. 	<i>TWE</i> , pp. 626–627 <i>TWE</i> , p. 625	5 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 23.3 Assessment. • Assign relevant questions from Chapter 23 Assessment. 	<i>SE</i> , p. 625 <i>SE</i> , pp. 629–631	5 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Assessment activity. 	<i>TWE</i> , p. 625	5 minutes

[total = 45 minutes]

Pacing Guide

1/2 block

Review/Assessment

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Dynamics of Life, *URB* = Unit
Resources Booklet

Assessment Resources

- _____ *Chapter Assessment*, Ch. 23 *URB*
- _____ *Performance Assessment in the Biology Classroom*, *TCR*
- _____ *Alternate Assessment in the Science Classroom*, *TCR*

Multimedia Resources

- _____ *MindJogger Videoquizzes*, Ch. 23
- _____ *ExamView®Pro Testmaker CD-ROM*, Ch. 23
- _____ *Interactive Chalkboard CD-ROM*:
Ch. 23 Assessment

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students check homework answers. 	<i>TWE</i> , pp. 625, 629–631	5 minutes
Reviewing the Chapter <ul style="list-style-type: none"> • Answer homework questions. • Answer any final questions about Chapter 23. 	<i>TWE</i> , pp. 605–631	5 minutes
Assessment <ul style="list-style-type: none"> • Distribute the test and allow students to work quietly. 	<i>Chapter Assessment</i> , pp. 91–96 <i>URB</i>	30 minutes
Closing <ul style="list-style-type: none"> • As students complete the test, have them read the Chapter 24 Opener. • If students have time, let them explore the Internet connection for Chapter 24. 	<i>SE</i> , p. 632 bdol.glencoe.com	5 minutes

[total = 45 minutes]