

Principles of Ecology

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
1	2.1 Organisms and Their Environment
1	2.2 Nutrition and Energy Flow
0.5	Chapter Assessment

Block Schedule Planning Guide 2.1

Organisms and Their Environment

pages 35–45

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

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

Objectives

- **Distinguish** between the biotic and abiotic factors in the environment.
- **Compare** the different levels of biological organization and living relationships important in ecology.
- **Explain** the difference between a niche and a habitat.

State/local objectives: _____

Lesson Resources

- _____ Section Focus Transparency 4 and Master, *TCR/URB*
- _____ *MiniLab Worksheet*, p. 3 *URB*
- _____ *Reinforcement and Study Guide*, *URB*
English, pp. 9–10; Spanish, pp. 13–14

Virtual Labs CD-ROM

- _____ Virtual Lab: *A Mini Biosphere*
- _____ *Using the Internet in the Science Classroom*, *TCR*
- _____ Glencoe Science Web site: bdol.glencoe.com

Multimedia Resources

- _____ **Interactive Chalkboard CD-ROM:**
Section 2.1 Presentation
- _____ **MindJogger Videoquizzes**, Ch. 2
- _____ **Guided Reading Audio Summaries MP3**

Optional Resources

- _____ *Laboratory Manual*, pp. 9–10 *TCR*
- _____ *Critical Thinking/Problem Solving*, p. 18 *URB*
- _____ Project, *TWE* p. 41

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Distribute the corrected Chapter 1 tests while students complete the Bellringer for Section 2.1. 	Section Focus Transparency 4 and Master, <i>TCR/URB</i>	5 minutes
Discussion <ul style="list-style-type: none"> • Answer Chapter 1 test questions. 	<i>Chapter Assessment</i> , pp. 49–50 <i>URB</i>	5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Chapter 2 with the Two-Minute Chapter Launcher. • Teach the main concepts of Section 2.1. • Have students complete MiniLab 2.1. 	<i>TWE</i> , p. 34 <i>TWE</i> , pp. 35–37 <i>SE</i> , p. 36	40 minutes
In-Class Check <ul style="list-style-type: none"> • Discuss the MiniLab and assess students' results. • Do the Check for Understanding and Reteach Strategies. 	<i>TWE</i> , p. 36 <i>TWE</i> , p. 45	15 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 2.1 Assessment. • Assign the Problem Solving Lab 2.1. Instruct students to answer the Thinking Critically questions in their journals. • Assign relevant questions from Chapter 2 Assessment. 	<i>SE</i> , p. 45 <i>SE</i> , p. 37 <i>SE</i> , pp. 61–63	15 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Assessment activity. 	<i>TWE</i> , p. 45	10 minutes

[total = 90 minutes]

Block Schedule Planning Guide

2.2

Nutrition and Energy Flow

pages 46–57

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

Pacing Guide

1 block

Lesson & BioLab

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

Objectives

- **Compare** how organisms satisfy their nutritional needs.
- **Trace** the path of energy and matter in an ecosystem.
- **Analyze** how matter is cycled in the abiotic and biotic parts of the biosphere.

State/local objectives: _____

Lesson Resources

- _____ Section Focus Transparency 5 and Master, *TCR/URB*
- _____ Basic Concepts Transparency 2 and Master, *TCR/URB*
- _____ *MiniLab Worksheet*, p. 4 *URB*
- _____ *BioLab Worksheet*, pp. 5–6 *URB*
- _____ *Concept Mapping*, p. 17 *URB*
- _____ *Reinforcement and Study Guide*, *URB* English, pp. 11–12; Spanish, pp. 15–16
- _____ Reteaching Skills Transparencies 1–3 and Masters, *TCR/URB*

Multimedia Resources

- _____ **Interactive Chalkboard CD-ROM:** Section 2.2 Presentation
- _____ **MindJogger Videoquizzes**, Ch. 2
- _____ **Guided Reading Audio Summaries MP3** *Using the Internet in the Science Classroom*, *TCR*
- _____ Glencoe Science Web site: bdol.glencoe.com

Optional Resources

- _____ *Probeware Labs*, pp. 1–4 *TCR*
- _____ *Inside Story Poster* *TCR*

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students complete the Bellringer for Section 2.2. • Have students check homework answers. 	Section Focus Transparency 5 and Master, <i>TCR/URB</i> <i>TWE</i> , pp. 45, 61–63	10 minutes
Discussion <ul style="list-style-type: none"> • Answer homework questions. 	<i>TWE</i> , pp. 45, 61–63	5 minutes
Core Lesson <ul style="list-style-type: none"> • Teach the main concepts of Section 2.2. • Use the Teaching Strategies to discuss the Inside Story. 	<i>TWE</i> , pp. 46–57 <i>TWE</i> , p. 55	30 minutes
In-Class Check <ul style="list-style-type: none"> • Have students begin the BioLab, including the planning and initial preparations. (Note: this lab will take 1–2 weeks to complete. Be sure to check students' progress.) • Answer questions on Chapter 2 in preparation for the test. 	<i>TWE</i> , pp. 58–59	25 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 2.2 Assessment. • Assign relevant questions from Chapter 2 Assessment. 	<i>SE</i> , p. 57 <i>SE</i> , pp. 61–63	15 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Reinforcement activity. 	<i>TWE</i> , p. 49	5 minutes

[total = 90 minutes]

Pacing Guide

1/2 block

Review/Assessment

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

Assessment Resources

- _____ *Chapter Assessment*, Ch. 2 *URB*
- _____ *Performance Assessment in the Biology Classroom*, *TCR*
- _____ *Alternate Assessment in the Science Classroom*, *TCR*

Multimedia Resources

- _____ *MindJogger Videoquizzes*, Ch. 2
- _____ *ExamView®Pro Testmaker CD-ROM*, Ch. 2
- _____ *Interactive Chalkboard CD-ROM: Ch. 2*
Assessment

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students check homework answers. 	<i>TWE</i> , pp. 57, 61–63	5 minutes
Reviewing the Chapter <ul style="list-style-type: none"> • Answer homework questions. • Answer any final questions about Chapter 2. 	<i>TWE</i> , pp. 35–63	5 minutes
Assessment <ul style="list-style-type: none"> • Distribute the test and allow students to work quietly. 	<i>Chapter Assessment</i> , pp. 31–36 <i>URB</i>	30–35 minutes
Closing <ul style="list-style-type: none"> • As students complete the test, have them read the Chapter 3 Opener. • If students have time, let them explore the Internet connection for Chapter 3. 	<i>SE</i> , p. 64 bdol.glencoe.com	5 minutes

[total = 45 minutes]