

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	11.1 DNA: The Molecule of Heredity
2	11.2 From DNA to Protein
0.5	11.3 Genetic Changes
0.5	Chapter Assessment

Block Schedule Planning Guide 11.1

DNA: The Molecule of Heredity

pages 281–287

Pacing Guide

1 block

Lesson & Problem-Solving Lab

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; B.2, B.3; C.2, C.3; G.1–3

Objectives

- **Analyze** the structure of DNA.
- **Determine** how the structure of DNA enables it to reproduce itself accurately.

State/local objectives: _____

Lesson Resources

- _____ Section Focus Transparency 26 and Master, *TCR/URB*
- _____ Basic Concepts Transparency 16 and Master, *TCR/URB*
- _____ *Concept Mapping*, p. 55 *URB*
- _____ *Reinforcement and Study Guide*, *URB* English, p. 47; Spanish, p. 51

- _____ *MindJogger Videoquizzes*, Ch. 11
- _____ **Guided Reading Audio Summaries MP3**
- _____ *Using the Internet in the Science Classroom*, *TCR*
- _____ Glencoe Science Web site: bdol.glencoe.com

Optional Resources

- _____ *Laboratory Manual*, pp. 59–62 *TCR*

Multimedia Resources

- _____ **Interactive Chalkboard CD-ROM:** Section 11.1 Presentation

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Distribute the corrected Chapter 10 tests while students complete the Bellringer for Section 11.1. 	Section Focus Transparency 26 and Master, <i>TCR/URB</i>	5 minutes
Discussion <ul style="list-style-type: none"> • Answer Chapter 10 test questions. 	<i>Chapter Assessment</i> , pp. 168–169 <i>URB</i>	5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Chapter 11 with the Two-Minute Chapter Launcher. • Teach the main concepts of Section 11.1. • Have students do the Project: Building a Model in small groups. • Do the Quick Demo. 	<i>TWE</i> , p. 280 <i>TWE</i> , pp. 281–287 <i>TWE</i> , p. 286 <i>TWE</i> , p. 285	40 minutes
In-Class Check <ul style="list-style-type: none"> • Have students complete Problem-Solving Lab 11.1 and assess their answers. • Use the Chalkboard Example. • Do the Check for Understanding and Reteach strategies. 	<i>SE</i> and <i>TWE</i> , p. 283 <i>TWE</i> , p. 284 <i>TWE</i> , p. 287	25 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 11.1 Assessment. • Assign the Inside Story: Critical Thinking question. • Assign relevant questions from Chapter 11 Assessment. 	<i>SE</i> , p. 287 <i>SE</i> , p. 286 <i>SE</i> , pp. 305–307	10 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Discussion. 	<i>TWE</i> , p. 282	5 minutes

[total = 90 minutes]

Block Schedule Planning Guide

11.2

From DNA to Protein

pages 288–295

Pacing Guide

2 blocks

Lesson & BioLab

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National Science Content Standards: UCP.1, UCP.2; A.1, A.2; B.2; C.2; G.1

Objectives

- **Relate** the concept of the gene to the sequences of nucleotides in DNA.
- **Sequence** the steps involved in protein synthesis.

State/local objectives: _____

Lesson Resources

- _____ Section Focus Transparency 27 and Master, *TCR/URB*
- _____ Basic Concepts Transparencies 17–18 and Masters, *TCR/URB*
- _____ *MiniLab Worksheet*, pp. 39–40 *URB*
- _____ *BioLab Worksheet*, pp. 43–46 *URB*
- _____ *Reinforcement and Study Guide*, *URB* English, pp. 48–49; Spanish, pp. 52–53
- _____ Reteaching Skills Transparency 18 and Master, *TCR/URB*

Multimedia Resources

- _____ **Interactive Chalkboard CD-ROM:** Section 11.2 Presentation
- _____ **MindJogger Videoquizzes**, Ch. 11
- _____ **Guided Reading Audio Summaries MP3** *Using the Internet in the Science Classroom*, *TCR*
- _____ Glencoe Science Web site: bdol.glencoe.com

Optional Resources

- _____ *Critical Thinking/Problem Solving*, p. 56 *URB*

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students complete the Bellringer for Section 11.2. • Have students check homework answers. 	Section Focus Transparency 27 and Master, <i>TCR/URB</i> <i>TWE</i> , pp. 287, 305–307	5 minutes
Discussion <ul style="list-style-type: none"> • Answer homework questions. 	<i>TWE</i> , pp. 287, 305–307	5 minutes
Core Lesson <ul style="list-style-type: none"> • Introduce Section 11.2 with the Quick Demo. • Teach the main concepts of Section 11.2. • Have students complete the Critical Thinking/Problem Solving worksheet in small groups. 	<i>TWE</i> , p. 289 <i>TWE</i> , pp. 288–295 <i>Critical Thinking/Problem Solving</i> , p. 56 <i>URB</i>	65 minutes
In-Class Check <ul style="list-style-type: none"> • Have students read the BioLab, follow the Procedure, and answer the Analyze and Conclude questions • Assess students' answers to the BioLab, and discuss their results. • Review Section 11.2 concepts with the Reinforcement and Study Guide. 	<i>SE</i> , pp. 302–303 <i>TWE</i> , pp. 302–303 <i>Reinforcement and Study Guide</i> , <i>URB</i> English, pp. 48–49; Spanish, pp. 52–53	70 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 11.2 Assessment. • Assign relevant questions from Chapter 11 Assessment. • Have interested students do the Enrichment activity and share their results with the class. 	<i>SE</i> , p. 295 <i>SE</i> , pp. 305–307 <i>TWE</i> , p. 290	25 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Discussion activity. 	<i>TWE</i> , p. 292	10 minutes

[total = 180 minutes]

Block Schedule Planning Guide

11.3

Genetic Changes

pages 296–301

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

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

Objectives

- **Categorize** the different kinds of mutations that can occur in DNA.
- **Compare** the effects of different kinds of mutations on cells and organisms.

State/local objectives: _____

Lesson Resources

- _____ Section Focus Transparency 28 and Master, *TCR/URB*
- _____ *MiniLab Worksheet*, p. 41, *URB*
- _____ *Reinforcement and Study Guide*, *URB*
English, p. 50; Spanish, p. 54
- _____ Reteaching Skills Transparencies 19a–19b and Masters, *TCR/URB*

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

Optional Resources

- _____ *Laboratory Manual*, pp. 63–66 *TCR*

Multimedia Resources

- _____ **Interactive Chalkboard CD-ROM:**
Section 11.3 Presentation
- _____ **MindJogger Videoquizzes**, Ch. 11

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students complete the Bellringer for Section 11.3. • Have students check homework answers. 	Section Focus Transparency 28 and Master, <i>TCR/URB</i> <i>TWE</i> , pp. 295, 305–307	5 minutes
Discussion <ul style="list-style-type: none"> • Answer homework questions. 	<i>TWE</i> , pp. 295, 305–307	5 minutes
Core Lesson <ul style="list-style-type: none"> • Teach the main concepts of Section 11.3. • Have students complete MiniLab 11.2 in small groups. 	<i>TWE</i> , pp. 296–301 <i>SE</i> , p. 300	15 minutes
In-Class Check <ul style="list-style-type: none"> • Do the Quick Demo. • Use the Reinforcement activity. • Do the Check for Understanding and Reteach strategies. • Answer questions on Chapter 11 in preparation for the test. 	<i>TWE</i> , p. 298 <i>TWE</i> , p. 298 <i>TWE</i> , p. 301 <i>TWE</i> , pp. 281–307	10 minutes
Homework <ul style="list-style-type: none"> • Have students complete Section 11.3 Assessment. • Assign relevant questions from Chapter 11 Assessment. 	<i>SE</i> , p. 301 <i>SE</i> , pp. 305–307	5 minutes
Closing <ul style="list-style-type: none"> • Assess students with the Modified Assessment. 	<i>TWE</i> , p. 301	5 minutes

[total = 45 minutes]

Pacing Guide

1/2 block

Review/Assessment

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Edition, *TCR* = Teacher Classroom
Resources, *BDOL* = Biology: The
Dynamics of Life, *URB* = Unit
Resources Booklet

Assessment Resources

- _____ *Chapter Assessment*, Ch. 11 *URB*
- _____ *Performance Assessment in the Biology Classroom*, *TCR*
- _____ *Alternate Assessment in the Science Classroom*, *TCR*

Multimedia Resources

- _____ *MindJogger Videoquizzes*, Ch. 11
- _____ *ExamView® Pro Testmaker CD-ROM*, Ch. 11
- _____ *Interactive Chalkboard CD-ROM:*
Ch. 11 Assessment

Lesson Plan

Activity	Resources	Suggested Time
Classroom Management <ul style="list-style-type: none"> • Have students check homework answers. 	<i>TWE</i> , p. 301 <i>TWE</i> , pp. 305–307	5 minutes
Reviewing the Chapter <ul style="list-style-type: none"> • Answer homework questions. • Answer any final questions about Chapter 11. 	<i>TWE</i> , pp. 281–307	5 minutes
Assessment <ul style="list-style-type: none"> • Distribute the test and allow students to work quietly. 	<i>Chapter Assessment</i> , pp. 73–78 <i>URB</i>	30–35 minutes
Closing <ul style="list-style-type: none"> • As students complete the test, let them explore the Internet connection for Chapter 12. 	bdol.glencoe.com	0–5 minutes

[total = 45 minutes]