

# The Theory of Evolution



## 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.

<b>Period</b>	<b>Content</b>
1	15.1 Natural Selection and the Evidence for Evolution
1.5	15.2 Mechanisms of Evolution
0.5	Chapter Assessment

# Block Schedule Planning Guide 15.1

## Natural Selection and the Evidence for Evolution

pages 401–411

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

### Pacing Guide

1 period

Lesson & MiniLab

**KEY:** *SE* = Student Edition, *TWE* = Teacher Wraparound Edition, *TCR* = Teacher Classroom Resources, *NGS* = National Geographic Society videodisc, *BDOL* = Biology: The Dynamics of Life

### Objectives

- **Summarize** Darwin's theory of natural selection.
- **Explain** how the structural and physiological adaptations of organisms relate to natural selection.
- **Distinguish** among the types of evidence for evolution.

**Georgia QCC:** 1.1, 2.1, 12.1, 12.2, 12.3

### Lesson Resources

- \_\_\_\_\_ Section Focus Transparency 37 and Master
- \_\_\_\_\_ *BioLab and MiniLab Worksheets*, p. 81 *TCR*
- \_\_\_\_\_ *Concept Mapping*, p. 15 *TCR*
- \_\_\_\_\_ *Reinforcement and Study Guide*, pp. 65–66 *TCR*
- \_\_\_\_\_ *Content Mastery*, p. 74 *TCR*

- \_\_\_\_\_ **English/Spanish Audiocassettes**, Section 15.1
- \_\_\_\_\_ **BDOL Videodisc**, Disc 1, Side 2
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*
- \_\_\_\_\_ Glencoe Science Web Site:  
[ga.science.glencoe.com](http://ga.science.glencoe.com)

### Multimedia Resources

- \_\_\_\_\_ **BDOL CD-ROM** Section 15.1 Summary
- \_\_\_\_\_ **MindJogger Videoquizzes**, Ch. 15

### Optional Resources

- \_\_\_\_\_ *Laboratory Manual*, pp. 103–104, 105–108 *TCR*
- \_\_\_\_\_ *Critical Thinking/Problem Solving*, p. 15 *TCR*
- \_\_\_\_\_ *Spanish Resources*

### Lesson Plan

Activity	Resources	Suggested Time
<b>Classroom Management</b> <ul style="list-style-type: none"> <li>• Distribute the corrected Chapter 14 tests while students complete the Bellringer for Section 15.1.</li> </ul>	Section Focus Transparency 37 and Master	5 minutes
<b>Discussion</b> <ul style="list-style-type: none"> <li>• Answer Chapter 14 test questions.</li> </ul>	<i>Chapter Assessment</i> , pp. 275–277 <i>TCR</i>	5 minutes
<b>Core Lesson</b> <ul style="list-style-type: none"> <li>• Introduce Chapter 15 with the Getting Started Demo.</li> <li>• Teach the main concepts of Section 15.1.</li> <li>• Do the Enrichment activity.</li> </ul>	<i>TWE</i> , p. 400 <i>TWE</i> , pp. 401–411 <i>TWE</i> , p. 405	30–35 minutes
<b>In-Class Check</b> <ul style="list-style-type: none"> <li>• Have students complete MiniLab 15-1. Discuss their answers to the Analysis questions.</li> <li>• Have students complete the Portfolio: Evolution in small groups. Choose one member of each group to share their results with the class.</li> <li>• Review the main concepts of Section 15.1 with the Concept Mapping worksheet.</li> </ul>	<i>SE</i> and <i>TWE</i> , p. 406 <i>TWE</i> , p. 410 <i>Concept Mapping</i> , p. 15 <i>TCR</i>	25–30 minutes
<b>Homework</b> <ul style="list-style-type: none"> <li>• Have students complete Section 15.1 Assessment.</li> <li>• Assign the Portfolio: Breeds of Dogs.</li> <li>• Assign relevant questions from Chapter 15 Assessment.</li> </ul>	<i>SE</i> , p. 411 <i>TWE</i> , p. 407 <i>SE</i> , pp. 425–427	10 minutes
<b>Closing</b> <ul style="list-style-type: none"> <li>• Assess students with the Close Activity.</li> </ul>	<i>TWE</i> , p. 411	10 minutes

[total = 90 minutes]

# Block Schedule Planning Guide 15.2

## Mechanisms of Evolution

pages 412–421

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

### Pacing Guide

1 1/2 periods

Lesson & BioLab

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### Objectives

- **Summarize** the effects of the different types of natural selection on gene pools.
- **Relate** changes in genetic equilibrium to mechanisms of speciation.
- **Explain** the role of natural selection in convergent and divergent evolution.

**Georgia QCC:** 1.1, 1.2, 2.1, 11.1, 12.1, 12.2, 12.3

### Lesson Resources

- \_\_\_\_\_ Section Focus Transparency 38 and Master
- \_\_\_\_\_ Basic Concepts Transparencies 21–22 and Masters
- \_\_\_\_\_ *BioLab and MiniLab Worksheets*, pp. 72–74 TCR
- \_\_\_\_\_ *Reinforcement and Study Guide*, pp. 67–68 TCR
- \_\_\_\_\_ *Content Mastery*, p. 75 TCR
- \_\_\_\_\_ Reteaching Skills Transparency 24 and Master

- \_\_\_\_\_ **MindJogger Videoquizzes**, Ch. 15
- \_\_\_\_\_ **English/Spanish Audiocassettes**, Section 15.2
- \_\_\_\_\_ **BDOL Videodisc**, Disc 1, Side 2
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, TCR
- \_\_\_\_\_ Glencoe Science Web Site:  
[ga.science.glencoe.com](http://ga.science.glencoe.com)

### Multimedia Resources

- \_\_\_\_\_ BDOL CD-ROM Section 15.2 Summary

### Optional Resources

- \_\_\_\_\_ *Critical Thinking/Problem Solving*, p. 15 TCR
- \_\_\_\_\_ *Spanish Resources*

### Lesson Plan

Activity	Resources	Suggested Time
<b>Classroom Management</b> <ul style="list-style-type: none"> <li>• Have students complete the Bellringer for Section 15.2.</li> <li>• Have students check homework answers.</li> </ul>	Section Focus Transparency 38 and Master <i>TWE</i> , pp. 411, 425–427	10 minutes
<b>Discussion</b> <ul style="list-style-type: none"> <li>• Answer homework questions.</li> </ul>	<i>TWE</i> , pp. 411, 425–427	5 minutes
<b>Core Lesson</b> <ul style="list-style-type: none"> <li>• Introduce Section 15.2 with the Visual Learning strategy for Figure 15.12</li> <li>• Teach the main concepts of Section 15.2.</li> <li>• Do the Quick Demo.</li> </ul>	<i>TWE</i> , p. 413 <i>TWE</i> , pp. 412–421 <i>TWE</i> , p. 418	45 minutes
<b>In-Class Check</b> <ul style="list-style-type: none"> <li>• Have students read the BioLab and answer the Analyze and Conclude questions.</li> <li>• Answer questions on Chapter 15 in preparation for the test.</li> </ul>	<i>SE</i> , pp. 422–423 <i>TWE</i> , pp. 400–427	55 minutes
<b>Homework</b> <ul style="list-style-type: none"> <li>• Have students complete Section 15.2 Assessment.</li> <li>• Assign relevant questions from Chapter 15 Assessment.</li> </ul>	<i>SE</i> , p. 421 <i>SE</i> , pp. 425–427	10 minutes
<b>Closing</b> <ul style="list-style-type: none"> <li>• Assess students with the Discussion Activity.</li> </ul>	<i>TWE</i> , p. 421	10 minutes

[total = 135 minutes]

## Pacing Guide

1/2 period

Review/Assessment

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of Life

### Assessment Resources

- \_\_\_\_\_ *Chapter Assessment*, Ch. 15 *TCR*
- \_\_\_\_\_ *Performance Assessment in the Biology Classroom*, *TCR*
- \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*
- \_\_\_\_\_ *5 Days to the Georgia High School Graduation Test*, *TCR*

### Multimedia Resources

- \_\_\_\_\_ *MindJogger Videoquizzes*, Ch. 15
- \_\_\_\_\_ *ExamView® Pro Software*, Ch. 15
- \_\_\_\_\_ *BDOL Interactive CD-ROM* Ch. 15 quiz

### Lesson Plan

Activity	Resources	Suggested Time
<b>Classroom Management</b> <ul style="list-style-type: none"> <li>• Have students check homework answers.</li> </ul>	<i>TWE</i> , p. 421 <i>TWE</i> , pp. 425–427	5 minutes
<b>Reviewing the Chapter</b> <ul style="list-style-type: none"> <li>• Answer homework questions.</li> <li>• Answer any final questions about Chapter 15.</li> </ul>	<i>TWE</i> , pp. 400–427	5 minutes
<b>Assessment</b> <ul style="list-style-type: none"> <li>• Distribute the test and allow students to work quietly.</li> </ul>	<i>Chapter Assessment</i> , pp. 85–90 <i>TCR</i>	30–35 minutes
<b>Closing</b> <ul style="list-style-type: none"> <li>• As students complete the test, let them explore the Internet connection for Chapter 17.</li> </ul>	<a href="http://ga.science.glencoe.com">ga.science.glencoe.com</a>	0–5 minutes

[total = 45 minutes]