

Lesson Plan

4.1

Population Dynamics



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

pp. 94–103

3 class session(s)

Section Objectives

- **Compare and contrast** exponential and linear population growth.
- **Relate** the reproductive patterns of different populations of organisms to models of population growth.
- **Predict** effects of environmental factors on population growth.

National Science Content Standards

UCP.1–3; A.1, A.2; C.4, C.5; F.2, F.4, F.5, F.6; G.1, G.2

Georgia QCC

1.1, 1.2, 2.1, 25.1, 25.3, 25.5

Focus

- _____ Section Focus Transparency 8 and Master
- _____ Getting Started Demo, *TWE* p. 94
- _____ Bellringer, *TWE* p. 94

Teach

- _____ MiniLab 4-1, *SE* p. 96
- _____ Inside Story, *SE* p. 98
- _____ Problem-Solving Lab 4-1, *SE* p. 99
- _____ Investigate BioLab, *SE* p. 108
- _____ Chemistry Connection, *SE* p. 110
- _____ Biology Journal, *TWE* pp. 97, 99
- _____ Portfolio, *TWE* p. 98
- _____ Alternative Lab, *TWE* p. 100
- _____ Quick Demo, *TWE* p. 101
- _____ *BioLab and MiniLab Worksheets*, p. 17 *TCR*
- _____ *Laboratory Manual*, pp. 23–26, 27–30 *TCR*
- _____ *Concept Mapping*, p. 4 *TCR*
- _____ *Spanish Resources*

Assess/Reteach

- _____ Section Assessment, *SE* p. 103
- _____ Check for Understanding, *TWE* p. 102
- _____ Reteach, *TWE* p. 103
- _____ *Content Mastery*, pp. 17–18, 20 *TCR*
- _____ *Reinforcement and Study Guide*, pp. 15–16 *TCR*
- _____ Reteaching Skills Transparency 6 and Master

Enrichment/Application

- _____ Project, *TWE* pp. 96, 98
- _____ Enrichment, *TWE* p. 97
- _____ Extension, *TWE* p. 103
- _____ *Critical Thinking/Problem Solving*, p. 4 *TCR*
- _____ *Tech Prep Applications*, pp. 5–6 *TCR*

Close

- _____ Activity, *TWE* p. 103

Chapter Assessment

- _____ Assessment, *TWE* pp. 96, 99, 100, 101, 102, 103
- _____ *Performance Assessment in the Biology Classroom*, *TCR*
- _____ *Alternate Assessment in the Science Classroom*, *TCR*

Multimedia Options

- _____ **BDOL CD-ROM** Section 4.1 Summary; BioQuest: *Antarctic Food Web*; Animation: *Carrying Capacity*
- _____ **MindJogger Videoquizzes**, Ch.4 videotape
- _____ **Videotape:** *The Secret of Life: Gone Before You Know It*
- _____ **ExamView®Pro Software**, Ch. 4
- _____ *Using the Internet in the Science Classroom*, *TCR*
- _____ **BDOL Videodisc:** *Carrying Capacity Videodisc: The Infinite Voyage: The Keepers of Eden; The Secret of Life: Competition, Predator—Prey*
- _____ **NGS Videodisc:** *GTV: Planetary Manager*
- _____ Glencoe Science Web Site: ga.science.glencoe.com



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

pp. 104–113

2 class session(s)

Section Objectives

- **Relate** population characteristics to population growth rates.
- **Compare** the age structure of rapidly growing, slow-growing, and no-growth countries.
- **Hypothesize** about problems that can be caused by immigration and emigration.

National Science Content Standards

UCP.1–3; A.1, A.2; C.4–6; F.4, F.5; G.1, G.3

Georgia QCC

1.1, 1.2, 2.1, 3.1, 25.5, 27.1

Focus

- _____ Section Focus Transparency 9 and Master
 _____ Bellringer *TWE*, p. 104

Teach

- _____ MiniLab 4-2, *SE* p. 105
 _____ Problem-Solving Lab 4-2, *SE* p. 106
 _____ Portfolio, *TWE* p. 104
 _____ Cultural Diversity, *TWE* p. 105
- _____ Quick Demo, *TWE* p. 106
 _____ *BioLab and MiniLab Worksheets*, pp. 18–20 *TCR*
 _____ *Spanish Resources*

Assess/Reteach

- _____ Section Assessment, *SE* p. 107
 _____ Check for Understanding, *TWE* p. 107
 _____ Reteach, *TWE* p. 107
 _____ *Reinforcement and Study Guide*, pp. 17–18 *TCR*
 _____ *Content Mastery*, pp. 17, 19–20 *TCR*
- _____ *5 Days to the Georgia High School Graduation Test*, *TCR*

Enrichment/Application

- _____ Tech Prep, *TWE* p. 104
 _____ Extension, *TWE* p. 107

Close

- _____ Activity, *TWE* p. 107

Chapter Assessment

- _____ Chapter Assessment, *SE* pp. 111–113
 _____ Assessment, *TWE* pp. 105, 106, 107, 109
 _____ **BDOL Interactive CD-ROM**, Chapter 4 quiz
 _____ *Chapter Assessment*, pp. 19–24 *TCR*
 _____ *Performance Assessment in the Biology Classroom*, *TCR*
 _____ *Alternate Assessment in the Science Classroom*, *TCR*

Multimedia Options

- _____ **BDOL CD-ROM** Section 4.2 Summary
 _____ **MindJogger Videoquizzes**, Ch. 4 videotape
 _____ **ExamView®Pro Software**, Ch. 4
 _____ *Using the Internet in the Science Classroom*, *TCR*
 _____ Glencoe Science Web Site: ga.science.glencoe.com