

Lesson Plan 12.1

Mendelian Inheritance of Human Traits

pp. 309–314

1 class session(s)

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

Section Objectives

- Interpret a pedigree.
- Determine human genetic disorders that are caused by inheritance of recessive alleles.
- Predict how a human trait can be determined by a simple dominant allele.

National Science Content Standards

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

Focus

- _____ Section Focus Transparency 29 and Master, *TCR/URB*
- _____ Two-Minute Chapter Launcher, *TWE* p. 308
- _____ Bellringer, *TWE* p. 309

Teach

- _____ MiniLab 12.1, *SE* p. 310
- _____ Problem-Solving Lab 12.1, *SE* p. 311
- _____ Quick Demo, *TWE* p. 312
- _____ *MiniLab Worksheet*, p. 82 *URB*
- _____ *Transparency Worksheets*, pp. 99, 103–104 *URB*
- _____ *Reading Essentials for Biology*, Section 12.1 *TCR*

Assess/Reteach

- _____ Section Assessment, *SE* p. 314
- _____ Check for Understanding, *TWE* p. 314
- _____ Reteach, *TWE* p. 314
- _____ Reteaching Skills Transparency 20 and Master, *TCR/URB*
- _____ *Reinforcement and Study Guide*, *URB*: English, p. 89; Spanish, p. 93

Enrichment/Application

- _____ Tech Prep, *TWE* p. 311
- _____ Extension, *TWE* p. 314
- _____ *Critical Thinking/Problem Solving*, p. 98 *URB*
- _____ *Real World BioApplications*, pp. 87–88 *URB*

Chapter Assessment

- _____ Assessment, *TWE* pp. 310, 311, 314
- _____ *Alternate Assessment in the Science Classroom*, *TCR*
- _____ *Performance Assessment in the Biology Classroom*, *TCR*

Multimedia Options

- _____ Interactive Chalkboard CD-ROM:
Section 12.1 Presentation
- _____ MindJogger Videoquizzes, Ch. 12 DVD/VHS
- _____ ExamView® Pro Testmaker CD-ROM, Ch. 12
- _____ *Using the Internet in the Science Classroom*, *TCR*
- _____ TeacherWorks™ CD-ROM
- _____ Guided Reading Audio Summaries MP3
- _____ Glencoe Science Web site: bdol.glencoe.com

Lesson Plan 12.2

When Heredity Follows Different Rules

pp. 315–322

2 class session(s)

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

Section Objectives

- **Distinguish** between alleles for incomplete dominance and codominance.
- **Explain** the patterns of multiple allelic and polygenic inheritance.
- **Analyze** the pattern of sex-linked inheritance.
- **Summarize** how internal and external environments affect gene expression.

National Science Content Standards

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

Focus

_____ Section Focus Transparency 30 and Master, *TCR/URB*
_____ Bellringer, *TWE* p. 315

Teach

_____ Problem-Solving Lab 12.2, *SE* p. 318
_____ Design Your Own BioLab, *SE* p. 330
_____ Biology Journal, *TWE* p. 315
_____ Additional Lab 12.1, *TWE* p. 316
_____ Quick Demo, *TWE* p. 317
_____ *MiniLab Worksheet*, p. 84 *URB*
_____ *BioLab Worksheet*, pp. 85–86 *URB*
_____ *Concept Mapping*, p. 97 *URB*
_____ *Reading Essentials for Biology*, Section 12.2 *TCR*
_____ *Transparency Worksheets*, pp. 100, 105–106 *URB*

Assess/Reteach

_____ Section Assessment, *SE* p. 322
_____ Reinforcement, *TWE* p. 319
_____ Check for Understanding, *TWE* p. 322
_____ Reteach, *TWE* p. 322
_____ Reteaching Skills Transparency 21 and Master, *TCR/URB*
_____ *Reinforcement and Study Guide*, *URB*: English, pp. 90–91; Spanish, pp. 94–95

Enrichment/Application

_____ Project, *TWE* p. 321
_____ Extension, *TWE* p. 322

Chapter Assessment

_____ Assessment, *TWE* pp. 317, 318, 322
_____ *Alternate Assessment in the Science Classroom*, *TCR*
_____ *Performance Assessment in the Biology Classroom*, *TCR*

Multimedia Options

_____ **Interactive Chalkboard CD-ROM:**
Section 12.2 Presentation
_____ **MindJogger Videoquizzes**, Ch. 12 DVD/VHS
_____ **ExamView® Pro Testmaker CD-ROM**, Ch. 12
_____ **TeacherWorks™ CD-ROM**
_____ **Guided Reading Audio Summaries MP3**
_____ **Virtual Labs CD-ROM**
Virtual Lab: *Sex-Linked Traits*
_____ *Using the Internet in the Science Classroom*, *TCR*
_____ Glencoe Science Web site: bdol.glencoe.com

Lesson Plan 12.3

Complex Inheritance of Human Traits

pp. 323–329

2 class session(s)

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

Section Objectives

- Compare codominance, multiple allelic, sex-linked, and polygenic patterns of inheritance in humans.
- Distinguish among conditions that result from extra autosomal or sex chromosomes.

National Science Content Standards

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

Focus

- _____ Section Focus Transparency 31 and Master, TCR/URB
- _____ Bellringer TWE p. 323

Teach

- _____ Inside Story, SE p. 325
- _____ Problem-Solving Lab 12.3, SE p. 326
- _____ MiniLab 12.2, SE p. 327
- _____ Connection to Social Studies, SE p. 332
- _____ Cultural Diversity, TWE p. 328
- _____ Portfolio, TWE p. 324
- _____ Design Your Own BioLab, SE p. 330
- _____ Biology Journal, TWE p. 331
- _____ Additional Lab 12.2, TWE p. 326
- _____ Quick Demo, TWE p. 328
- _____ Transparency Worksheet, p. 101 URB
- _____ Laboratory Manual, pp. 71–74 TCR

Assess/Reteach

- _____ Section Assessment, SE p. 329
- _____ Check for Understanding, TWE p. 329
- _____ Reteach, TWE p. 329
- _____ Reinforcement and Study Guide, URB: English, p. 92; Spanish, p. 96

Enrichment/Application

- _____ Extension, TWE p. 329

Chapter Assessment

- _____ Chapter Assessment, SE pp. 333–335
- _____ Assessment, TWE pp. 326, 327, 329
- _____ Interactive Chalkboard CD-ROM, Chapter 12 Assessment
- _____ Chapter Assessment, pp. 107–112 URB
- _____ Student Recording Sheet, p. 113 URB
- _____ Alternate Assessment in the Science Classroom, TCR
- _____ Performance Assessment in the Biology Classroom, TCR
- _____ The Princeton Review: Reviewing Biology, pp. 23–24 TCR

Multimedia Options

- _____ Interactive Chalkboard CD-ROM: Section 12.3 Presentation
- _____ MindJogger Videoquizzes, Ch. 12 DVD/VHS
- _____ ExamView® Pro Testmaker CD-ROM, Ch. 12
- _____ TeacherWorks™ CD-ROM
- _____ Guided Reading Audio Summaries MP3
- _____ Using the Internet in the Science Classroom, TCR
- _____ Glencoe Science Web site: bdol.glencoe.com