



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

pp. 342–348

1 class session(s)

### Section Objectives

- **Predict** the outcome of a test cross.
- **Evaluate** the importance of plant and animal breeding to humans.

### National Science Content Standards

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

### Georgia QCC

1.1, 2.1, 3.2, 10.2, 11.3

### Focus

Section Focus Transparency 32 and Master Getting Started Demo, *TWE* p. 342  
Bellringer, *TWE* p. 343

### Teach

- \_\_\_\_\_ Focus on Selective Breeding of Cats, *SE* p. 344
- \_\_\_\_\_ Problem-Solving Lab 13-1, *SE* p. 347
- \_\_\_\_\_ Cultural Diversity, *TWE* p. 344
- \_\_\_\_\_ Portfolio, *TWE* p. 345
- \_\_\_\_\_ Biology Journal, *TWE* p. 346
- \_\_\_\_\_ Quick Demo, *TWE* p. 346
- \_\_\_\_\_ *Laboratory Manual*, pp. 91–94 *TCR*
- \_\_\_\_\_ *Spanish Resources*

### Assess/Reteach

- \_\_\_\_\_ Section Assessment, *SE* p. 348
- \_\_\_\_\_ Check for Understanding, *TWE* p. 348
- \_\_\_\_\_ Reteach, *TWE* p. 348
- \_\_\_\_\_ *Content Mastery*, pp. 61, 64 *TCR*
- \_\_\_\_\_ *Reinforcement and Study Guide*, p. 55 *TCR*

### Enrichment/Application

- \_\_\_\_\_ Tech Prep, *TWE* p. 345
- \_\_\_\_\_ Extension, *TWE* p. 348

### Close

- \_\_\_\_\_ Discussion, *TWE* p. 348

### Chapter Assessment

- \_\_\_\_\_ Assessment, *TWE* pp. 346, 347, 348
- \_\_\_\_\_ *Performance Assessment in the Biology Classroom*, *TCR*
- \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*

### Multimedia Options

- \_\_\_\_\_ **BDOL CD-ROM** Section 13.1 Summary
- \_\_\_\_\_ **MindJogger Videoquizzes**, Ch. 13 videotape
- \_\_\_\_\_ **ExamView®Pro Software**, Ch. 13
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*
- \_\_\_\_\_ Glencoe Science Web Site: [ga.science.glencoe.com](http://ga.science.glencoe.com)

# Lesson Plan 13.2

## Recombinant DNA Technology



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pp. 349–356

2 class session(s)

### Section Objectives

- Summarize the steps used to engineer transgenic organisms.
- Give examples of applications and benefits of genetic engineering.

### National Science Content Standards

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

### Georgia QCC

1.1, 1.2, 8.1, 10.1, 11.3

### Focus

- \_\_\_\_\_ Section Focus Transparency 33 and Master Bellringer, *TWE* p. 349

### Teach

- \_\_\_\_\_ MiniLab 13-1, *SE* p. 351
- \_\_\_\_\_ Inside Story, *SE* p. 354
- \_\_\_\_\_ Problem-Solving Lab 13-2, *SE* p. 355
- \_\_\_\_\_ Investigate BioLab, *SE* p. 362
- \_\_\_\_\_ BioTechnology, *SE* p. 364
- \_\_\_\_\_ Quick Demo, *TWE* p. 350
- \_\_\_\_\_ Portfolio, *TWE* p. 353
- \_\_\_\_\_ Biology Journal, *TWE* p. 355
- \_\_\_\_\_ *BioLab and MiniLab Worksheets*, pp. 61–62 *TCR*
- \_\_\_\_\_ Basic Concepts Transparency 19 and Master
- \_\_\_\_\_ *Laboratory Manual*, pp. 95–98 *TCR*
- \_\_\_\_\_ *Spanish Resources*

### Assess/Reteach

- \_\_\_\_\_ Section Assessment, *SE* p. 356
- \_\_\_\_\_ Check for Understanding, *TWE* p. 356
- \_\_\_\_\_ Reteach, *TWE* p. 356
- \_\_\_\_\_ *Content Mastery*, pp. 61–62, 64 *TCR*
- \_\_\_\_\_ *Reinforcement and Study Guide*, pp. 56–57 *TCR*

### Enrichment/Application

- \_\_\_\_\_ Project, *TWE* p. 352
- \_\_\_\_\_ Enrichment, *TWE* pp. 352, 353
- \_\_\_\_\_ Extension, *TWE* p. 356
- \_\_\_\_\_ *Tech Prep Applications*, pp. 21–22 *TCR*

### Close

- \_\_\_\_\_ Discussion, *TWE* p. 356

### Chapter Assessment

- \_\_\_\_\_ Assessment, *TWE* pp. 351, 353, 355, 356
- \_\_\_\_\_ *Performance Assessment in the Biology Classroom*, *TCR*
- \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*

### Multimedia Options

- \_\_\_\_\_ **BDOL CD-ROM** Section 13.2 Summary; Animation: *Gene Cloning*; Video: *Bioengineering*
- \_\_\_\_\_ **MindJogger Videoquizzes**, Ch. 13 videotape
- \_\_\_\_\_ **ExamView®Pro Software**, Ch. 13
- \_\_\_\_\_ **BDOL Videodisc:** *Gene Cloning*, *Bioengineering*, *Recombinant DNA*
- \_\_\_\_\_ **Videodisc:** *The Infinite Voyage: Miracles by Design*, *The Geometry of Life*; *The Secret of Life: Electrophoresis and PCR Segment*
- \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*
- \_\_\_\_\_ Glencoe Science Web Site: [ga.science.glencoe.com](http://ga.science.glencoe.com)



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pp. 357–367

2 class session(s)

### Section Objectives

- **Analyze** how the effort to completely map and sequence the human genome will advance human knowledge.
- **Predict** future applications of the Human Genome Project.

### National Science Content Standards

UCP.2, UCP.3; A.1, A.2; C.2; E.1, E.2; F.1, F.6; G.1-3

### Georgia QCC

1.1, 1.2, 2.1, 3.2, 8.1, 10.2, 11.1, 11.3

### Focus

\_\_\_\_\_ Section Focus Transparency 34 and Master  
 \_\_\_\_\_ Bellringer, *TWE* p. 357

### Teach

\_\_\_\_\_ MiniLab 13-2, *SE* p. 358  
 \_\_\_\_\_ Careers in Biology, *SE* p. 359  
 \_\_\_\_\_ Problem-Solving Lab, *SE* p. 361  
 \_\_\_\_\_ Alternative Lab, *TWE* p. 358  
 \_\_\_\_\_ Quick Demo, *TWE* p. 359  
 \_\_\_\_\_ Biology Journal, *TWE* p. 360  
 \_\_\_\_\_ Portfolio, *TWE* p. 360  
 \_\_\_\_\_ *BioLab and MiniLab Worksheets*, pp. 63–66 *TCR*  
 \_\_\_\_\_ *Concept Mapping*, p. 13 *TCR*  
 \_\_\_\_\_ *Spanish Resources*

### Assess/Reteach

\_\_\_\_\_ Section Assessment, *SE* p. 361  
 \_\_\_\_\_ Check for Understanding, *TWE* p. 361  
 \_\_\_\_\_ Reteach, *TWE* p. 361  
 \_\_\_\_\_ *Content Mastery*, pp. 61, 63–64 *TCR*  
 \_\_\_\_\_ *Reinforcement and Study Guide*, p. 58 *TCR*  
 \_\_\_\_\_ *5 Days to the Georgia High School Graduation Test*, *TCR*

### Enrichment/Application

\_\_\_\_\_ Extension, *TWE* p. 361  
 \_\_\_\_\_ *Critical Thinking/Problem Solving*, p. 13 *TCR*  
 \_\_\_\_\_ *Tech Prep Applications*, pp. 21–22 *TCR*

### Close

\_\_\_\_\_ Discussion, *TWE* p. 361

### Chapter Assessment

\_\_\_\_\_ Chapter Assessment, *SE* pp. 365–367  
 \_\_\_\_\_ Assessment, *TWE* pp. 358, 359, 360, 361  
 \_\_\_\_\_ **BDOL Interactive CD-ROM**, Chapter 13 quiz  
 \_\_\_\_\_ *Chapter Assessment*, pp. 73–78 *TCR*  
 \_\_\_\_\_ *Alternate Assessment in the Science Classroom*, *TCR*  
 \_\_\_\_\_ *Performance Assessment in the Biology Classroom*, *TCR*

### Multimedia Options

\_\_\_\_\_ **BDOL CD-ROM** Section 13.3 Summary; Animation: *Recombinant DNA*  
 \_\_\_\_\_ **MindJogger Videoquizzes**, Ch. 13 videotape  
 \_\_\_\_\_ **ExamView®Pro Software**, Ch. 13  
 \_\_\_\_\_ **Videodisc:** *The Infinite Voyage: The Geometry of Life*  
 \_\_\_\_\_ *Using the Internet in the Science Classroom*, *TCR*  
 \_\_\_\_\_ Glencoe Science Web Site: [ga.science.glencoe.com](http://ga.science.glencoe.com)