

6 Algebra: Exploring Equations and Functions



Chapter Pacing Guide

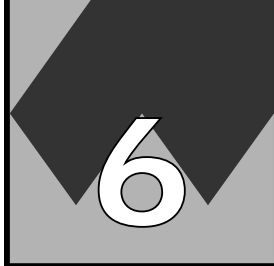
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

Day (Standard)	Day (Honors)	Lesson	Title
1	1	*Chapter Project	Theme: Roller Coasters America's Scream Machines
2 & 3		*6-1A	<small>HANDS-ON LAB</small> Cooperative Learning Solving Equations Using Models
	2	6-1	Solving Addition and Subtraction Equations
4	3	6-1B	<small>THINKING LAB</small> Problem Solving Work Backward
5	4	6-2	Solving Multiplication Equations
6 & 7		*6-3A	<small>HANDS-ON LAB</small> Cooperative Learning Solving Two-Step Equations
	5 & 6	6-3	Solving Two-Step Equations
8	7	6-4	Writing Expressions and Equations
9	8	6-5	Inequalities
10	9 & 10	6-6	Functions and Graphs
11 & 12		*6-7A	<small>HANDS-ON LAB</small> Cooperative Learning A Function of Time
	11	6-7	Functions and Equations
13	12	Review: Study Guide and Assessment	
14	13	Assessment: Chapter Test	

*Optional

Chapter Resources

<p>Meeting Individual Needs <i>Investigations for the Special Education Student</i>, How Does Your Garden Grow?, pp. 39-42 <i>Spanish Study Guide and Assessment</i> <i>Study Guide and Practice Workbook</i></p>	<p>Technology <i>Electronic Teacher's Classroom</i> <i>Resources (ETCR)</i> www.glencoe.com/sec/math/mac/mathnet</p>
<p>Interactive Mathematics: Activities and Investigations Units 13 and 16</p>	<p>Applications <i>Family Letters and Activities</i>, pp. 37-38 <i>Spanish Family Letters and Activities</i>, pp. 37-38</p>



Chapter Project (pp. 224-225)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Use equations to determine average speed from distance and time measurements.
- _____ Use graphs and charts to compare quantities.

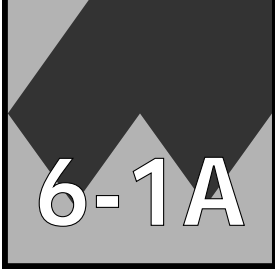
Theme: Roller Coasters

- _____ Chapter Project, *SE*, p. 225
- _____ Chapter 6 Notes, *TWE*, p. 224
- _____ Question of the Day, *TWE*, p. 224
- _____ ⇔ *Investigations and Projects Masters*, pp. 37-40

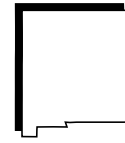
Homework Assignments

- _____ p. 236, Working on the Chapter Project, Exercise 32
- _____ p. 252, Working on the Chapter Project, Exercise 8
- _____ p. 257, Working on the Chapter Project, Exercise 30
- _____ p. 261, Completing the Chapter Project, Alternative Assessment

KEY SE = Student Edition TWE = Teacher's Wraparound Edition ⇔ = Other Program Components



Lesson Planning Guide (pp. 226-227)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Use models to solve equations.

NCTM Standards:

1-6, 9

New Mexico Mathematics Performance Standards

Grades 5-8:

1-F-1

MANAGEMENT

_____ Getting Started, *TWE*, p. 226

_____ ⇨ *Hands-On Lab Masters*, p. 6: integer counters;
p. 7: pattern for cup; p. 9: equation mat

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*,
Lesson 6-1A

_____ ⇨ *Overhead Manipulative Resources*: cups, counters, equation mat

ASSESS

_____ *TWE*, p. 227

_____ ⇨ *Hands-On Lab Masters*, p. 49

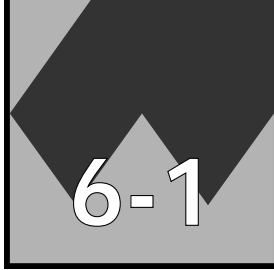
Class Activity (pp. 226-227)

_____ All: 1-15

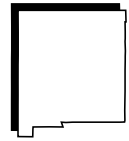
_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 227

KEY SE = Student Edition TWE = Teacher's Wraparound Edition ⇨ = Other Program Components



Lesson Planning Guide (pp. 228-231)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve addition and subtraction equations.

NCTM Standards: 1-7, 9
New Mexico Mathematics Performance Standards Grades 5-8: 6-C-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 228
- _____ ⇨ Transparency 6-1A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 228

2 TEACH

- _____ ⇨ Transparency 6-1B
- _____ Thinking Algebraically, *TWE*, p. 229
- _____ Multiple Learning Styles, Kinesthetic, *TWE*, p. 229
- _____ In-Class Examples, *TWE*, p. 229
- _____ ⇨ *Study Guide Masters*, p. 42
- _____ Reteaching the Lesson, *TWE*, p. 230
- _____ Error Analysis, *TWE*, p. 230
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-1, Interactive Lesson 6-1
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 230

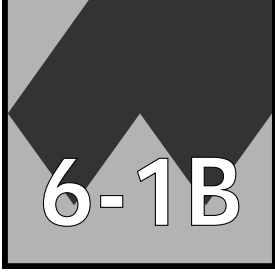
Homework Assignments (p. 231)	
_____ Core: 13-33 odd, 35-39	_____ Enriched: 12-30 even, 32-39
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 583
- _____ ⇨ *Practice Masters*, p. 42
- _____ ⇨ *Technology Masters*, Calculator Activity, p. 37

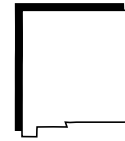
4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 231
- _____ Extending the Lesson, *TWE*, p. 231
- _____ ⇨ *Enrichment Masters*, p. 42

KEY	<i>SE</i> = Student Edition	<i>TWE</i> = Teacher's Wraparound Edition	⇨ = Other Program Components
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Lesson Planning Guide (pp. 232-233)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve problems by working backward.

1 FOCUS

_____ Getting Started, *TWE*, p. 232

2 TEACH

_____ In-Class Examples, *TWE*, p. 232

_____ Reteaching the Lesson, *TWE*, p. 232

3 PRACTICE/APPLY

_____ Check for Understanding, *TWE*, p. 233

NCTM Standards: 1-5, 7
New Mexico Mathematics Performance Standards Grades 5-8: 4-A-1

Homework Assignments (p. 233)

_____ All: 5-15

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 583

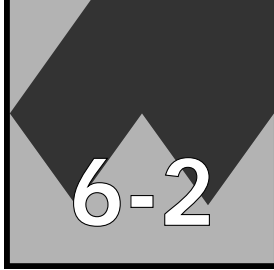
_____ Mixed Problem Solving, *SE*, pp. 605-606

4 ASSESS

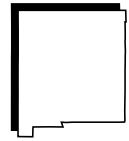
_____ Closing Activity, Writing, *TWE*, p. 233

_____ Extending the Lesson, *TWE*, p. 233

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Lesson Planning Guide (pp. 234-237)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve multiplication equations.

NCTM Standards: 1-7, 9
New Mexico Mathematics Performance Standards Grades 5-8: 1-A-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 234
- _____ ⇨ Transparency 6-2A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 234
- _____ Multiple Learning Styles, Interpersonal, *TWE*, p. 234

2 TEACH

- _____ ⇨ Transparency 6-2B
- _____ Using the Mini-Lab, *TWE*, p. 235
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 6-2
- _____ In-Class Examples, *TWE*, p. 235
- _____ ⇨ *Study Guide Masters*, p. 43
- _____ Reteaching the Lesson, *TWE*, p. 236
- _____ Error Analysis, *TWE*, p. 236
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-2, Interactive Lesson 6-2

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 236

Homework Assignments (pp. 236-237)	
_____ Core: 11-33 odd, 34-38	_____ Enriched: 12-30 even, 31, 33-38
_____ Optional: 32 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 584
- _____ ⇨ *Hands-On Lab Masters*, p. 77
- _____ ⇨ *Practice Masters*, p. 43
- _____ ⇨ *Diversity Masters*, p. 19

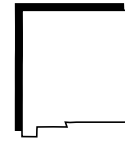
4 ASSESS

- _____ Let the Games Begin, *SE*, p. 237
- _____ Closing Activity, Speaking, *TWE*, p. 237
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 155
- _____ Extending the Lesson, *TWE*, p. 237
- _____ ⇨ *Enrichment Masters*, p. 43

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Lesson Planning Guide (p. 238)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Use models to solve two-step equations.

NCTM Standards:

1-6, 9

New Mexico Mathematics Performance Standards

Grades 5-8:

6-C-1

MANAGEMENT

_____ Getting Started, *TWE*, p. 238

_____ ⇨ *Hands-On Lab Masters*, p. 6: integer counters;
p. 7: pattern for cup; p. 9: equation mat

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*,
Lesson 6-3A

_____ ⇨ *Overhead Manipulative Resources*: cups, counters, equation mat

ASSESS

_____ *TWE*, p. 238

_____ ⇨ *Hands-On Lab Masters*, p. 50

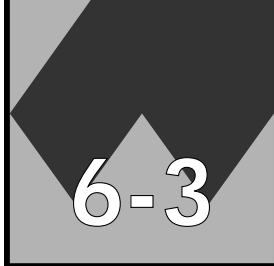
Class Activity (p. 238)

_____ All: 1-8

_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 238

KEY SE = Student Edition TWE = Teacher's Wraparound Edition ⇨ = Other Program Components



Lesson Planning Guide (pp. 239-241)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve two-step equations.

NCTM Standards: 1-5, 7, 9
New Mexico Mathematics Performance Standards Grades 5-8: 6-C-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 239
- _____ ⇨ Transparency 6-3A
- _____ Motivating the Lesson, Communication, *TWE*, p. 239

2 TEACH

- _____ ⇨ Transparency 6-3B
- _____ Reading Mathematics, *TWE*, p. 239
- _____ In-Class Examples, *TWE*, p. 240
- _____ ⇨ *Study Guide Masters*, p. 44
- _____ Reteaching the Lesson, *TWE*, p. 240
- _____ Error Analysis, *TWE*, p. 240
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-3, Interactive Lesson 6-3
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 240

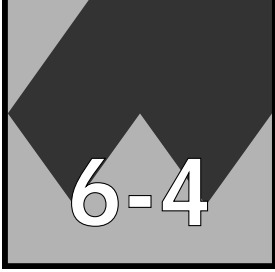
Homework Assignments (p. 241)	
_____ Core: 11-33 odd, 34-38	_____ Enriched: 12-30 even, 31-38
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 584
- _____ ⇨ *Practice Masters*, p. 44
- _____ ⇨ *School to Career Masters*, p. 19

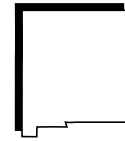
4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 241
- _____ Extending the Lesson, *TWE*, p. 241
- _____ ⇨ *Enrichment Masters*, p. 44

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Lesson Planning Guide (pp. 242-245)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Write simple algebraic expressions and equations from verbal phrases and sentences.

NCTM Standards: 1-5, 9
New Mexico Mathematics Performance Standards Grades 5-8: 2-A-1, 13-A-1, 13-A-2, 13-F-2

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 242
- _____ ⇨ Transparency 6-4A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 242
- _____ Multiple Learning Styles, Auditory/Musical, *TWE*, p. 242

2 TEACH

- _____ ⇨ Transparency 6-4B
- _____ Reading Mathematics, *TWE*, p. 243
- _____ Cross-Curriculum Cue, *TWE*, p. 243
- _____ In-Class Examples, *TWE*, p. 243
- _____ ⇨ *Study Guide Masters*, p. 45
- _____ Reteaching the Lesson, *TWE*, p. 244
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-4

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 244

Homework Assignments (pp. 244-245)

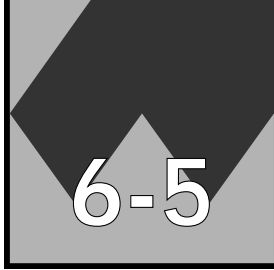
- _____ Core: 13-35 odd, 36-41 _____ Enriched: 12-32 even, 33-41
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 584
- _____ ⇨ *Practice Masters*, p. 45
- _____ ⇨ *Classroom Games*, pp. 17-20

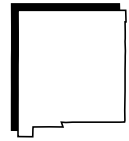
4 ASSESS

- _____ Family Activity, *SE*, p. 245
- _____ Closing Activity, Writing, *TWE*, p. 244
- _____ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 154
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 155
- _____ Extending the Lesson, *TWE*, p. 245
- _____ ⇨ *Enrichment Masters*, p. 45
- _____ Mid-Chapter Self Test, *SE*, p. 245

KEY *SE* = Student Edition *TWE* = Teacher's Wraparound Edition ⇨ = Other Program Components



Lesson Planning Guide (pp. 246-248)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve inequalities.

NCTM Standards: 1-5, 7
New Mexico Mathematics Performance Standards Grades 5-8: 13-E-1, 13-E-3

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 246
- _____ ⇨ Transparency 6-5A
- _____ Motivating the Lesson, Communication, *TWE*, p. 246

2 TEACH

- _____ ⇨ Transparency 6-5B
- _____ Using the Mini-Lab, *TWE*, p. 246
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 6-5
- _____ In-Class Examples, *TWE*, p. 247
- _____ ⇨ *Study Guide Masters*, p. 46
- _____ Reteaching the Lesson, *TWE*, p. 247
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-5

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 248

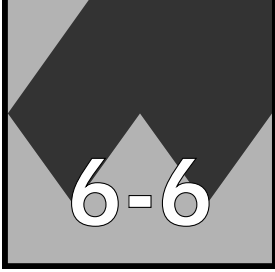
Homework Assignments (p. 248)	
_____ Core: 9-23 odd, 25-28	_____ Enriched: 10-22 even, 23-28
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 584
- _____ ⇨ *Practice Masters*, p. 46

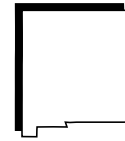
4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 248
- _____ Extending the Lesson, *TWE*, p. 248
- _____ ⇨ *Enrichment Masters*, p. 46

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Lesson Planning Guide (pp. 249-252)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Represent functions as ordered pairs.

NCTM Standards:

1-6, 8

New Mexico Mathematics Performance Standards

Grades 5-8:

4-B-2, 5-D-1, 12-B-1,
12-C-1, 13-C-1

1 FOCUS

_____ 5-Minute Check, *TWE*, p. 249

_____ ⇨ Transparency 6-6A

_____ Motivating the Lesson, Communication, *TWE*, p. 249

2 TEACH

_____ ⇨ Transparency 6-6B

_____ In-Class Examples, *TWE*, p. 250

_____ Using the Mini-Lab, *TWE*, p. 250

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 6-6

_____ ⇨ *Study Guide Masters*, p. 47

_____ Reteaching the Lesson, *TWE*, p. 251

_____ ⇨ *CD-ROM Program*, Resource Lesson 6-6, Extended Activity 6-6

3 PRACTICE/APPLY

_____ Check for Understanding, *SE*, p. 251

Homework Assignments (pp. 251-252)

_____ Core: 6, 7, 9, 11-13

_____ Enriched: 6, 7, 9-13

_____ Optional: 8 (Working on the Chapter Project)

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 585

_____ ⇨ *Practice Masters*, p. 47

_____ ⇨ *Technology Masters*, Graphing Calculator Activity, p. 38

_____ ⇨ *Science and Mathematics Lab Manual*, pp. 33-36

4 ASSESS

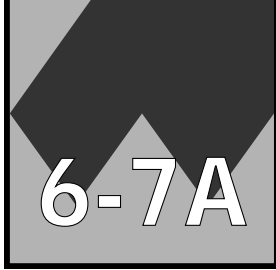
_____ Closing Activity, Modeling, *TWE*, p. 252

_____ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 156

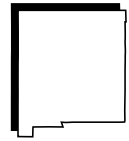
_____ Extending the Lesson, *TWE*, p. 252

_____ ⇨ *Enrichment Masters*, p. 47

KEY SE = Student Edition TWE = Teacher's Wraparound Edition ⇨ = Other Program Components



Lesson Planning Guide (p. 253)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Use a function rule to find the output of a function.

NCTM Standards: 1-5, 7-10
New Mexico Mathematics Performance Standards Grades 5-8: 12-C-1, 13-C-1

MANAGEMENT

- _____ Getting Started, *TWE*, p. 253
- _____ ⇨ *Hands-On Lab Masters*, p. 11: grid paper
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*,
Lesson 6-7A
- _____ ⇨ *Overhead Manipulative Resources*: coordinate grid

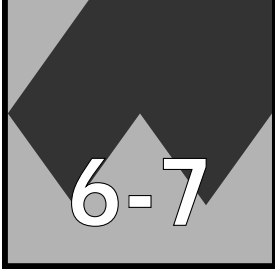
ASSESS

- _____ *TWE*, p. 253
- _____ ⇨ *Hands-On Lab Masters*, p. 51

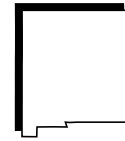
Class Activity (p. 253)	
_____ All: 1-5	
_____ Alternate Assignment:	_____

_____ Math Journal, *TWE*, p. 253

KEY <i>SE</i> = Student Edition <i>TWE</i> = Teacher's Wraparound Edition ⇨ = Other Program Components



Lesson Planning Guide (pp. 254-257)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve equations with two variables and graph the solution.

NCTM Standards:

1-5, 7-9, 12

New Mexico Mathematics Performance Standards

Grades 5-8:

12-D-1, 13-C-1, 13-D-2

1 FOCUS

_____ 5-Minute Check, *TWE*, p. 254

_____ ⇨ Transparency 6-7A

2 TEACH

_____ ⇨ Transparency 6-7B

_____ Thinking Algebraically, *TWE*, p. 255

_____ In-Class Examples, *TWE*, p. 255

_____ ⇨ *Study Guide Masters*, p. 48

_____ Reteaching the Lesson, *TWE*, p. 256

_____ Error Analysis, *TWE*, p. 256

_____ ⇨ *CD-ROM Program*, Resource Lesson 6-7, Interactive Lesson 6-7

_____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

_____ Check for Understanding, *SE*, p. 256

Homework Assignments (pp. 256-257)

_____ Core: 13-31 odd, 33-37

_____ Enriched: 12-28 even, 29, 31-37

_____ Optional: 30 (Working on the Chapter Project)

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 585

_____ ⇨ *Practice Masters*, p. 48

4 ASSESS

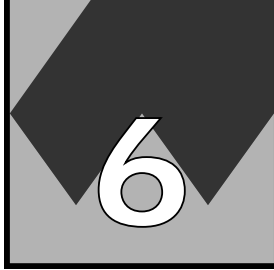
_____ Closing Activity, Speaking, *TWE*, p. 257

_____ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 156

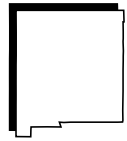
_____ Extending the Lesson, *TWE*, p. 48

_____ ⇨ *Enrichment Masters*, p. 48

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Review and Assessment (pp. 258-263)



Teacher's Name _____ Dates _____

Grade _____ Class _____
Review M Tu W Th F
Testing M Tu W Th F

- _____ Study Guide and Assessment, *SE*, pp. 258-261
- _____ Standardized Test Practice, *SE*, pp. 262-263
- _____ Chapter Test, *SE*, p. 612

⇨ **Assessment and Evaluation Masters (pp. 141-159)**

Multiple-Choice Tests

- _____ Form 1A, 1B, or 1C, pp. 141-146
- _____ Standardized Test Practice, pp. 157-158

Free-Response Tests

- _____ Form 2A, 2B, or 2C, pp. 147-152
- _____ Performance Assessment, p. 153
- _____ Cumulative Review, p. 159

- _____ ⇨ *MindJogger Videoquizzes*, Chapter 6
- _____ ⇨ *Test and Review Software*
- _____ ⇨ *CD-ROM Assessment Game*
- _____ ⇨ *State Test Preparation CD-ROM*

Interdisciplinary Investigation, SE, pp. 264-265

- _____ *Interdisciplinary Investigation*, TWE, pp. 264-265
- _____ ⇨ *Investigations and Projects Masters*, pp. 5-8

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