

6 Exploring Number Patterns



Chapter Pacing Guide

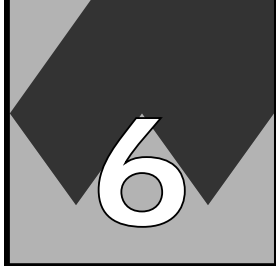
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

Day (Standard)	Day (Honors)	Lesson	Title
1	1	*Chapter Project	Theme: Sports Take Me Out to the Ball Game
2		6-1	Divisibility Patterns
3 & 4	2 & 3	6-2	Prime Factorization
		*6-2B	<small>HANDS-ON LAB</small> Cooperative Learning Basketball Factors
5	4	6-3A	<small>THINKING LAB</small> Problem Solving Make a List
6	5	6-3	Greatest Common Factor
7	6	6-4	Rational Numbers
8	7	6-5	Rational Numbers and Decimals
9	8	6-6	Integration: Probability Simple Events
10	9	6-7	Least Common Multiple
11 & 12	10	*6-8A	<small>HANDS-ON LAB</small> Cooperative Learning Density Property
		6-8	Comparing and Ordering Rational Numbers
13	11	6-9	Scientific Notation
14	12	Review: Study Guide and Assessment	
15	13	Assessment: Chapter Test	

* Optional

Chapter Resources

<p>Meeting Individual Needs <i>Investigations for the Special Education Student, Author's Fair</i>, pp. 13-14 <i>Spanish Study Guide and Assessment</i> <i>Study Guide and Practice Workbook</i></p>	<p>Technology <i>Electronic Teacher's Classroom Resources (ETCR)</i> www.glencoe.com/sec/math/mac/mathnet</p>
<p>Interactive Mathematics: Activities and Investigations Units 10 and 11</p>	<p>Applications <i>Family Letters and Activities</i>, pp. 63-64 <i>Spanish Family Letters and Activities</i>, pp. 63-64</p>



Chapter Project (pp. 230-231)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Learn how to organize data.
- _____ Learn to compare data by using their knowledge of rational numbers and probability.
- _____ Students should be able to express data they collect and make comparisons of the data in verbal form.

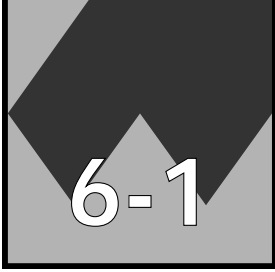
Theme: Sports

- _____ Chapter Project, *SE*, p. 231
- _____ Chapter 6 Notes, *TWE*, p. 230
- _____ Question of the Day, *TWE*, p. 230
- _____ ⇔ *Investigations and Projects Masters*, pp. 37-40

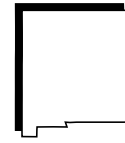
Homework Assignments

- _____ p. 248, Working on the Chapter Project, Exercise 33
- _____ p. 252, Working on the Chapter Project, Exercise 41
- _____ p. 264, Working on the Chapter Project, Exercise 32
- _____ p. 271, Completing the Chapter Project, Alternative Assessment

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



Lesson Planning Guide (pp. 232-234)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Use divisibility rules for 2, 3, 4, 5, 6, 8, 9, and 10.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 232
- _____ ⇨ Transparency 6-1A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 232

NCTM Standards: 1-8
New Mexico Mathematics Performance Standards Grades 5-8: 13-B-1

2 TEACH

- _____ ⇨ Transparency 6-1B
- _____ Using Mental Math, *TWE*, p. 233
- _____ In-Class Examples, *TWE*, p. 233
- _____ ⇨ *Study Guide Masters*, p. 41
- _____ Reteaching the Lesson, *TWE*, p. 233
- _____ Error Analysis, *TWE*, p. 233
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-1
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 233

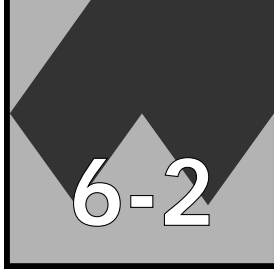
Homework Assignments (p. 234)	
_____ Core: 13-33 odd, 34-38	_____ Enriched: 12-30 even, 32-38
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 620
- _____ ⇨ *Practice Masters*, p. 41
- _____ ⇨ *Technology Masters*, Spreadsheet Activity, p. 64

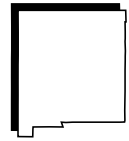
4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 234
- _____ Extending the Lesson, *TWE*, p. 234
- _____ ⇨ *Enrichment Masters*, p. 41

KEY	<i>SE</i> = Student Edition	<i>TWE</i> = Teacher's Wraparound Edition	⇨ = Other Program Components
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Lesson Planning Guide (pp. 235-238)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find the prime factorization of a composite number.

NCTM Standards: 1-7
New Mexico Mathematics Performance Standards Grades 5-8: 6-C-2, 6-D-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 235
- _____ ⇨ Transparency 6-2A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 235

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
- _____ Multiple Learning Styles, Logical, *TWE*, p. 235
- _____ In-Class Examples, *TWE*, p. 236
- _____ ⇨ *Study Guide Masters*, p. 42
- _____ Reteaching the Lesson, *TWE*, p. 236
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-2

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 237

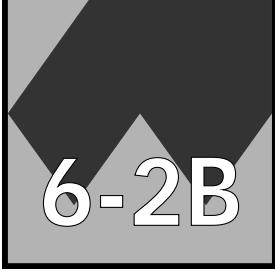
Homework Assignments (pp. 237-238)	
_____ Core: 11-31 odd, 33-37	_____ Enriched: 12-28 even, 30-37
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 620
- _____ ⇨ *Practice Masters*, p. 42
- _____ ⇨ *Classroom Games*, pp. 17-18

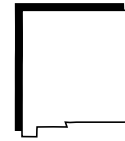
4 ASSESS

- _____ Let the Games Begin, *SE*, p. 238
- _____ Closing Activity, Writing, *TWE*, p. 238
- _____ Extending the Lesson, *TWE*, p. 238
- _____ ⇨ *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 (p. 239)



Teacher's Name _____ Dates _____
Grade _____ Class _____ M Tu W Th F

Objectives

_____ Discover the relationship of relatively prime numbers.

MANAGEMENT

_____ Getting Started, *TWE*, p. 239

ASSESS

_____ *TWE*, p. 239

_____ ⇄ *Hands-On Lab Masters*, p. 51

NCTM Standards: 1-5, 8, 12
New Mexico Mathematics Performance Standards Grades 5-8: 2-E-1, 4-B-1

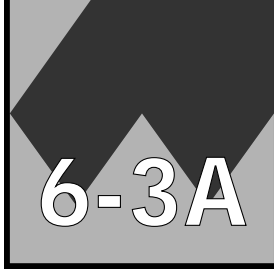
Class Activity (p. 239)

_____ All: 1-4

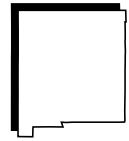
_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 239

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



Lesson Planning Guide (pp. 240-241)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve problems by making an organized list.

1 FOCUS

_____ Getting Started, *TWE*, p. 240

2 TEACH

_____ In-Class Example, *TWE*, p. 240

_____ Reteaching the Lesson, *TWE*, p. 240

3 PRACTICE/APPLY

_____ Check for Understanding, *TWE*, p. 241

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

Homework Assignments (p. 241)

_____ All: 4-13

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 620

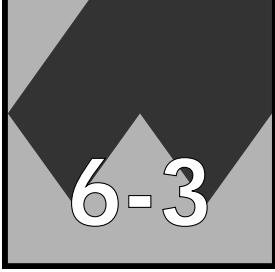
_____ Problem Solving, *SE*, pp. 645-646

4 ASSESS

_____ Closing Activity, Writing, *TWE*, p. 241

_____ Extending the Lesson, *TWE*, p. 241

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



Lesson Planning Guide (pp. 242-244)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find the greatest common factor of two or more numbers.

NCTM Standards:
1-9

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 242
- _____ ⇨ Transparency 6-3A
- _____ Motivating the Lesson, Communication, *TWE*, p. 242

2 TEACH

- _____ ⇨ Transparency 6-3B
- _____ Reading Mathematics, *TWE*, p. 242
- _____ In-Class Examples, *TWE*, p. 243
- _____ ⇨ *Study Guide Masters*, p. 43
- _____ Reteaching the Lesson, *TWE*, p. 243
- _____ Error Analysis, *TWE*, p. 243
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-3, Interactive Lesson 6-3
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 243-244

Homework Assignments (p. 244)

_____ Core: 9-25 odd, 26-29 _____ Enriched: 10-22 even, 24-29

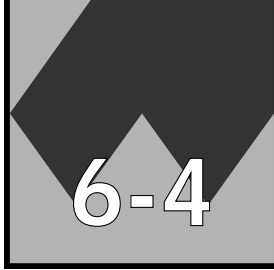
_____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 621
- _____ ⇨ *Practice Masters*, p. 43

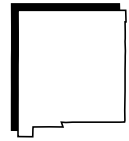
4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 244
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 155
- _____ Extending the Lesson, *TWE*, p. 244
- _____ ⇨ *Enrichment Masters*, p. 43

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



Lesson Planning Guide (pp. 245-248)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Identify and simplify rational numbers.

NCTM Standards: 1-7, 9, 12
New Mexico Mathematics Performance Standards Grades 5-8: 6-A-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 245
- _____ ⇨ Transparency 6-4A
- _____ Motivating the Lesson, Communication, *TWE*, p. 245

2 TEACH

- _____ ⇨ Transparency 6-4B
- _____ Using Cooperative Groups, *TWE*, p. 245
- _____ In-Class Examples, *TWE*, p. 246
- _____ ⇨ *Study Guide Masters*, p. 44
- _____ Reteaching the Lesson, *TWE*, p. 247
- _____ Error Analysis, *TWE*, p. 247
- _____ ⇨ *Transition Booklet*, pp. 15-18
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-4

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 247

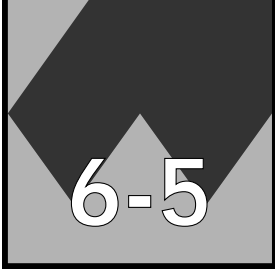
Homework Assignments (pp. 247-248)	
_____ Core: 11-31 odd, 34-38	_____ Enriched: 10-30 even, 31, 32, 34-38
_____ Optional: 33 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 621
- _____ ⇨ *Practice Masters*, p. 44

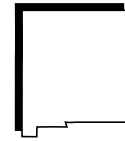
4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 248
- _____ Extending the Lesson, *TWE*, p. 248
- _____ ⇨ *Enrichment Masters*, p. 44
- _____ Mid-Chapter Self Test, *SE*, p. 248

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Lesson Planning Guide (pp. 249-252)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Express rational numbers as decimals and decimals as fractions.

NCTM Standards:

1-7, 9, 13

New Mexico Mathematics Performance Standards

Grades 5-8:

1-E-1, 5-B-1, 6-A-1, 6-C-1, 7-C-2, 7-E-1, 7-F-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 249
- _____ ⇨ Transparency 6-5A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 249
- _____ Cross-Curriculum Cue, *TWE*, p. 249

2 TEACH

- _____ ⇨ Transparency 6-5B
- _____ Using Mental Math, *TWE*, p. 250
- _____ In-Class Examples, *TWE*, pp. 250, 251
- _____ ⇨ *Study Guide Masters*, p. 45
- _____ Reteaching the Lesson, *TWE*, p. 251
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-5

3 PRACTICE/APPLY

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

Homework Assignments (pp. 251-252)

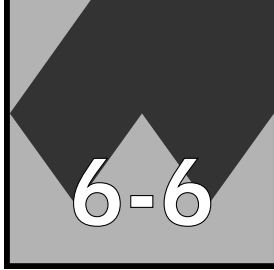
- _____ Core: 13-39 odd, 42-47 _____ Enriched: 14-36 even, 38-40, 42-47
- _____ Optional: 41 (Working on the Chapter Project)
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 621
- _____ ⇨ *Practice Masters*, p. 45
- _____ ⇨ *School to Career Masters*, p. 32

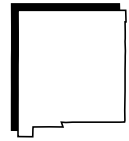
4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 252
- _____ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 154
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 155
- _____ ⇨ Extending the Lesson, *TWE*, p. 252
- _____ ⇨ *Enrichment Masters*, p. 45

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



Lesson Planning Guide (pp. 253-256)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find the probability of a simple event.

NCTM Standards: 1-4, 6, 7, 11, 12
New Mexico Mathematics Performance Standards Grades 5-8: 7-E-3, 11-A-1, 11-C-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 253
- _____ ⇨ Transparency 6-6A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 253

2 TEACH

- _____ ⇨ Transparency 6-6B
- _____ Reading Mathematics, *TWE*, p. 254
- _____ In-Class Examples, *TWE*, p. 254
- _____ ⇨ *Study Guide Masters*, p. 46
- _____ Reteaching the Lesson, *TWE*, p. 254
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-6, Interactive Lesson 6-6

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 254

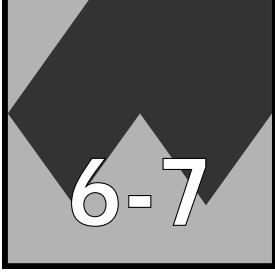
Homework Assignments (pp. 255-256)	
_____ Core: 11-33 odd, 35-39	_____ Enriched: 12-32 even, 33-39
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 622
- _____ ⇨ *Practice Masters*, p. 46

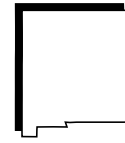
4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 256
- _____ Extending the Lesson, *TWE*, p. 256
- _____ ⇨ *Enrichment Masters*, p. 46

KEY	<i>SE</i> = Student Edition	<i>TWE</i> = Teacher's Wraparound Edition	⇨ = Other Program Components
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Lesson Planning Guide (pp. 257-259)



Teacher's Name _____ Dates _____
Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find the least common multiple of two or more numbers.

NCTM Standards:
1-9

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 257
- _____ ⇨ Transparency 6-7A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 257

2 TEACH

- _____ ⇨ Transparency 6-7B
- _____ Using the Mini-Lab, *TWE*, p. 257
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 6-7
- _____ Multiple Learning Styles, Auditory/Musical, *TWE*, p. 257
- _____ In-Class Examples, *TWE*, p. 258
- _____ ⇨ *Study Guide Masters*, p. 47
- _____ Reteaching the Lesson, *TWE*, p. 258
- _____ Error Analysis, *TWE*, p. 258
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-7, Interactive Lesson 6-7

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 258-259

Homework Assignments (p. 259)

_____ Core: 11-33 odd, 34-38 _____ Enriched: 12-30 even, 32-38
 _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 622
- _____ ⇨ *Practice Masters*, p. 47

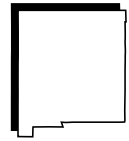
4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 259
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 156
- _____ Extending the Lesson, *TWE*, p. 259
- _____ ⇨ *Enrichment Masters*, p. 47

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Lesson Planning Guide (p. 260)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Use customary units of measurement to understand the density property.

NCTM Standards: 1-8, 10
New Mexico Mathematics Performance Standards Grades 5-8: 2-C-1, 5-B-1

MANAGEMENT

- _____ Getting Started, *TWE*, p. 260
- _____ ⇨ *Hands-On Lab Masters*, p. 15: number line
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 6-8A
- _____ ⇨ *Overhead Manipulative Resources*: number line transparency

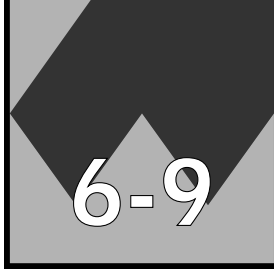
ASSESS

- _____ *TWE*, p. 260
- _____ ⇨ *Hands-On Lab Masters*, p. 52

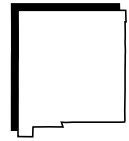
Class Activity (p. 260)
_____ All: 1-4
_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 260

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



Lesson Planning Guide (pp. 265-267)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Express numbers in scientific notation.

NCTM Standards: 1-5, 13
New Mexico Mathematics Performance Standards Grades 5-8: 4-C-2, 5-A-1, 7-F-2

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 265
- _____ ⇨ Transparency 6-9A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 265
- _____ Multiple Learning Styles, Verbal/Linguistic, *TWE*, p. 265

2 TEACH

- _____ ⇨ Transparency 6-9B
- _____ Thinking Algebraically, *TWE*, p. 265
- _____ In-Class Examples, *TWE*, p. 266
- _____ ⇨ *Study Guide Masters*, p. 49
- _____ Reteaching the Lesson, *TWE*, p. 266
- _____ ⇨ *Transition Booklet*, pp. 9-10
- _____ ⇨ *CD-ROM Program*, Resource Lesson 6-9

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 266

Homework Assignments (pp. 266-267)	
_____ Core: 11-31 odd, 32-36	_____ Enriched: 10-28 even, 30-36
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 623
- _____ ⇨ Practice Masters, p. 49
- _____ ⇨ Diversity Masters, p. 32
- _____ Family Activity, *SE*, p. 267
- _____ ⇨ *Technology Masters*, Calculator Activity, p. 63
- _____ Math in the Media, *SE*, p. 267

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 267
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 156
- _____ Extending the Lesson, *TWE*, p. 267
- _____ ⇨ *Enrichment Masters*, p. 49

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Review and Assessment (pp. 268-275)



Teacher's Name _____ Dates _____

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

- _____ Study Guide and Assessment, *SE*, pp. 268-271
- _____ Standardized Test Practice, *SE*, pp. 272-273
- _____ Chapter Test, *SE*, p. 652

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

Multiple-Choice Tests

Free-Response Tests

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

- _____ 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. 274-275

- _____ ⇔ *Interdisciplinary Investigation, TWE*, pp. 274-275
- _____ ⇔ *Investigations and Projects Masters*, pp. 5-8

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