

# 3 Using Proportion and Percent



## Chapter Pacing Guide

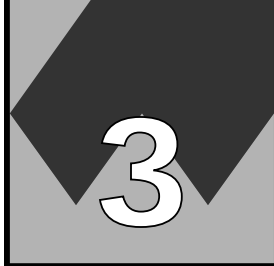
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

<i>Day (Standard)</i>	<i>Day (Honors)</i>	<i>Lesson</i>	<i>Title</i>
1	1	*Chapter Project	Theme: Travel Pack Your Bags
2		3-1	Ratios and Rates
3	2	3-2	Ratios and Percents
4	3	3-3	Solving Proportions
5 & 6	4 & 5	3-4	Fractions, Decimals, and Percents
		*3-4B	<small>HANDS-ON LAB</small> Cooperative Learning The Golden Ratio
7	6	3-5	Finding Percents
8	7	3-6A	<small>THINKING LAB</small> Problem Solving Reasonable Answers
9	8	3-6	Percent and Estimation
10	9	Review: Study Guide and Assessment	
11	10	Assessment: Chapter Test	

\* *Optional*

## Chapter Resources

<p><b>Meeting Individual Needs</b>  <i>Investigations for the Special Education Student, Park It!</i>, pp. 21-28  <i>Spanish Study Guide and Assessment Study Guide and Practice Workbook</i></p>	<p><b>Technology</b>  <i>Electronic Teacher's Classroom Resources (ETCR)</i>  <a href="http://www.glencoe.com/sec/math/mac/mathnet">www.glencoe.com/sec/math/mac/mathnet</a></p>
<p><b>Interactive Mathematics: Activities and Investigations</b>            Units 7 and 9</p>	<p><b>Applications</b>  <i>Family Letters and Activities</i>, pp. 57-58  <i>Spanish Family Letters and Activities</i>, pp. 57-58</p>



# Chapter Project (pp. 102-103)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

- \_\_\_\_\_ Learn to convert exchange rates to fractions, decimals, and percents.
- \_\_\_\_\_ Estimate the amount of money needed for travel.
- \_\_\_\_\_ Understand how to sketch circle graphs.

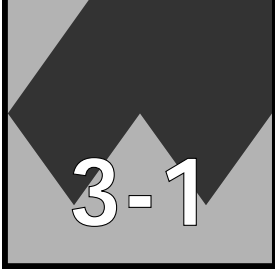
## Theme: Travel

- \_\_\_\_\_ Chapter Project, *SE*, p. 103
- \_\_\_\_\_ Chapter 3 Notes, *TWE*, p. 102
- \_\_\_\_\_ Question of the Day, *TWE*, p. 102
- \_\_\_\_\_ ⇨ *Investigations and Projects Masters*, pp. 25-28

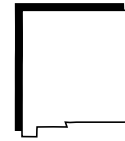
### Homework Assignments

- \_\_\_\_\_ p. 106, Working on the Chapter Project, Exercise 28
- \_\_\_\_\_ p. 113, Working on the Chapter Project, Exercise 29
- \_\_\_\_\_ p. 129, Working on the Chapter Project, Exercise 35
- \_\_\_\_\_ p. 133, Completing the Chapter Project, Alternative Assessment

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



# Lesson Planning Guide (pp. 104-106)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Express ratios as fractions in simplest form and determine unit rates.

<b>NCTM Standards:</b> 1-5, 7, 10
<b>New Mexico Mathematics Performance Standards</b> <b>Grades 5-8:</b> 5-C-1

## 1 FOCUS

- \_\_\_\_\_ 5-Minute Check, *TWE*, p. 104
- \_\_\_\_\_ ⇨ Transparency 3-1A
- \_\_\_\_\_ Motivating the Lesson, Problem Solving, *TWE*, p. 104

## 2 TEACH

- \_\_\_\_\_ ⇨ Transparency 3-1B
- \_\_\_\_\_ Multiple Learning Styles, Intrapersonal, *TWE*, p. 104
- \_\_\_\_\_ Thinking Algebraically, *TWE*, p. 104
- \_\_\_\_\_ In-Class Examples, *TWE*, p. 105
- \_\_\_\_\_ ⇨ *Study Guide Masters*, p. 20
- \_\_\_\_\_ Reteaching the Lesson, *TWE*, p. 105
- \_\_\_\_\_ Error Analysis, *TWE*, p. 105
- \_\_\_\_\_ ⇨ *Transition Booklet*, pp. 11-12, 15-16, 29-30
- \_\_\_\_\_ ⇨ *CD-ROM Program*, Resource Lesson 3-1, Interactive Lesson 3-1
- \_\_\_\_\_ ⇨ *Interactive Mathematics Tools Software*

## 3 PRACTICE/APPLY

- \_\_\_\_\_ Check for Understanding, *SE*, pp. 105-106

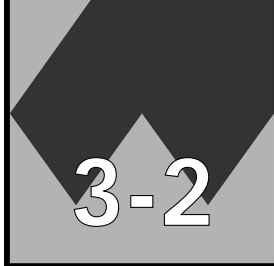
<b>Homework Assignments (p. 106)</b>	
_____ Core: 11-27 odd, 29-33	_____ Enriched: 10-24 even, 26, 27, 29-33
_____ Optional: 28 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- \_\_\_\_\_ Extra Practice, *SE*, p. 612
- \_\_\_\_\_ ⇨ *Practice Masters*, p. 20
- \_\_\_\_\_ ⇨ *Technology Masters*, Graphing Calculator Activity, p. 58

## 4 ASSESS

- \_\_\_\_\_ Closing Activity, Modeling, *TWE*, p. 106
- \_\_\_\_\_ Extending the Lesson, *TWE*, p. 106
- \_\_\_\_\_ ⇨ *Enrichment Masters*, p. 20

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# Lesson Planning Guide (pp. 107-110)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Express ratios as percents and vice versa.

<b>NCTM Standards:</b> 1-5, 7, 10, 12
<b>New Mexico Mathematics Performance Standards Grades 5-8:</b> 5-C-1

## 1 FOCUS

- \_\_\_\_\_ 5-Minute Check, *TWE*, p. 107
- \_\_\_\_\_ ⇨ Transparency 3-2A
- \_\_\_\_\_ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 107
- \_\_\_\_\_ Multiple Learning Styles, Visual/Spatial, *TWE*, p. 107
- \_\_\_\_\_ Cross-Curriculum Cue, *TWE*, p. 108

## 2 TEACH

- \_\_\_\_\_ ⇨ Transparency 3-2B
- \_\_\_\_\_ Using the Mini-Lab, *TWE*, p. 108
- \_\_\_\_\_ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 3-2
- \_\_\_\_\_ In-Class Examples, *TWE*, pp. 108-109
- \_\_\_\_\_ ⇨ *Study Guide Masters*, p. 21
- \_\_\_\_\_ Reteaching the Lesson, *TWE*, p. 109
- \_\_\_\_\_ ⇨ *Transition Booklet*, pp. 13-14
- \_\_\_\_\_ ⇨ *CD-ROM Program*, Resource Lesson 3-2

## 3 PRACTICE/APPLY

- \_\_\_\_\_ Check for Understanding, *SE*, p. 109

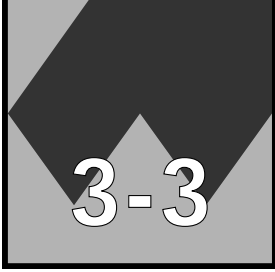
<b>Homework Assignments (pp. 109-110)</b>	
_____ Core: 11-33 odd, 35-39	_____ Enriched: 12-32 even, 33-39
_____ Alternate Assignment: _____	

- \_\_\_\_\_ Extra Practice, *SE*, p. 612
- \_\_\_\_\_ ⇨ *Practice Masters*, p. 21

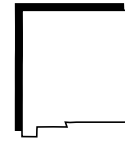
## 4 ASSESS

- \_\_\_\_\_ Closing Activity, Modeling, *TWE*, p. 110
- \_\_\_\_\_ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 71
- \_\_\_\_\_ Extending the Lesson, *TWE*, p. 110
- \_\_\_\_\_ ⇨ *Enrichment Masters*, p. 21

<b>KEY</b> <i>SE</i> = Student Edition <i>TWE</i> = Teacher's Wraparound Edition    ⇨ = Other Program Components
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# Lesson Planning Guide (pp. 111-113)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Solve proportions.

## 1 FOCUS

- \_\_\_\_\_ 5-Minute Check, *TWE*, p. 111
- \_\_\_\_\_ ⇨ Transparency 3-3A
- \_\_\_\_\_ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 111

## 2 TEACH

- \_\_\_\_\_ ⇨ Transparency 3-3B
- \_\_\_\_\_ Reading Mathematics, *TWE*, p. 111
- \_\_\_\_\_ In-Class Examples, *TWE*, p. 112
- \_\_\_\_\_ ⇨ *Study Guide Masters*, p. 22
- \_\_\_\_\_ Reteaching the Lesson, *TWE*, p. 112
- \_\_\_\_\_ Error Analysis, *TWE*, p. 112
- \_\_\_\_\_ ⇨ *Transition Booklet*, pp. 9-10
- \_\_\_\_\_ ⇨ *CD-ROM Program*, Resource Lesson 3-3, Interactive Lesson 3-3

## 3 PRACTICE/APPLY

- \_\_\_\_\_ Check for Understanding, *SE*, pp. 112-113

### Homework Assignments (p. 113)

- \_\_\_\_\_ Core: 11-27 odd, 30-34      \_\_\_\_\_ Enriched: 12-26 even, 27, 28, 30-34
- \_\_\_\_\_ Optional: 29 (Working on the Chapter Project)
- \_\_\_\_\_ Alternate Assignment: \_\_\_\_\_

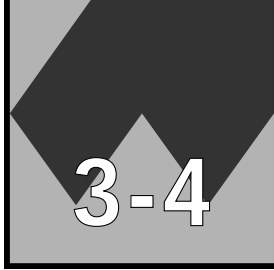
- \_\_\_\_\_ Extra Practice, *SE*, p. 612
- \_\_\_\_\_ ⇨ *Practice Masters*, p. 22
- \_\_\_\_\_ ⇨ *Diversity Masters*, p. 29
- \_\_\_\_\_ ⇨ *School to Career Masters*, p. 29
- \_\_\_\_\_ ⇨ *Technology Masters*, Calculator Activity, p. 57

## 4 ASSESS

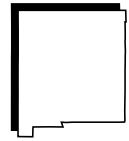
- \_\_\_\_\_ Closing Activity, Speaking, *TWE*, p. 113
- \_\_\_\_\_ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 70
- \_\_\_\_\_ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 71
- \_\_\_\_\_ Extending the Lesson, *TWE*, p. 113
- \_\_\_\_\_ ⇨ *Enrichment Masters*, p. 22

<b>NCTM Standards:</b> 1-5, 7-10
<b>New Mexico Mathematics Performance Standards Grades 5-8:</b> 3-C-2, 5-C-1, 6-C-3, 7-A-1, 7-C-1, 7-D-1, 13-F-2

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# Lesson Planning Guide (pp. 114-117)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Express percents as fractions and decimals and vice versa.

<b>NCTM Standards:</b> 1-5, 7, 9
<b>New Mexico Mathematics Performance Standards</b> <b>Grades 5-8:</b> 5-A-1, 6-C-3

## 1 FOCUS

- \_\_\_\_\_ 5-Minute Check, *TWE*, p. 114
- \_\_\_\_\_ ⇨ Transparency 3-4A
- \_\_\_\_\_ Motivating the Lesson, Communication, *TWE*, p. 114
- \_\_\_\_\_ Multiple Learning Styles, Logical, *TWE*, p. 114

## 2 TEACH

- \_\_\_\_\_ Transparency 3-4B
- \_\_\_\_\_ Using the Mini-Lab, *TWE*, p. 115
- \_\_\_\_\_ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 3-4
- \_\_\_\_\_ In-Class Examples, *TWE*, pp. 115, 116
- \_\_\_\_\_ ⇨ *Study Guide Masters*, p. 23
- \_\_\_\_\_ Reteaching the Lesson, *TWE*, p. 116
- \_\_\_\_\_ Error Analysis, *TWE*, p. 116
- \_\_\_\_\_ ⇨ *CD-ROM Program*, Resource Lesson 3-4

## 3 PRACTICE/APPLY

- \_\_\_\_\_ Check for Understanding, *SE*, p. 116

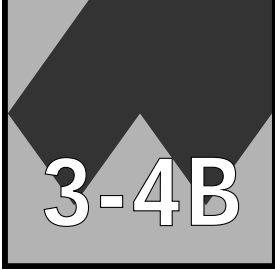
<b>Homework Assignments (pp. 116-117)</b>	
_____ Core: 15-47 odd, 48-54	_____ Enriched: 14-44 even, 46-54
_____ Alternate Assignment: _____	

- \_\_\_\_\_ Extra Practice, *SE*, p. 613
- \_\_\_\_\_ ⇨ *Practice Masters*, p. 23
- \_\_\_\_\_ ⇨ *Hands-On Lab Masters*, p. 70
- \_\_\_\_\_ ⇨ *Classroom Games*, pp. 7-9
- \_\_\_\_\_ Family Activity, *SE*, p. 116

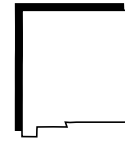
## 4 ASSESS

- \_\_\_\_\_ Closing Activity, Writing, *TWE*, p. 117
- \_\_\_\_\_ Extending the Lesson, *TWE*, p. 117
- \_\_\_\_\_ ⇨ *Enrichment Masters*, p. 23
- \_\_\_\_\_ Mid-Chapter Self Test, *SE*, p. 117

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# Lesson Planning Guide (pp. 118-119)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Find the value of the golden ratio.

### NCTM Standards:

1-5, 7, 8, 12, 13

### New Mexico Mathematics Performance Standards

#### Grades 5-8:

1-F-1, 2-A-2, 2-C-1, 4-A-2,  
12-A-1, 12-A-2

## MANAGEMENT

\_\_\_\_\_ Getting Started, *TWE*, p. 118

\_\_\_\_\_ ⇨ *Hands-On Lab Masters*, p. 10: grid paper

\_\_\_\_\_ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 3-4B

\_\_\_\_\_ ⇨ *Overhead Manipulative Resources*: centimeter grid

## ASSESS

\_\_\_\_\_ *TWE*, p. 119

\_\_\_\_\_ ⇨ *Hands-On Lab Masters*, p. 42

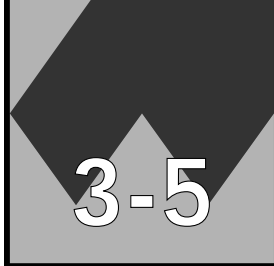
### Class Activity (pp. 118-119)

\_\_\_\_\_ All: 1-7

\_\_\_\_\_ Alternate Assignment: \_\_\_\_\_

\_\_\_\_\_ Math Journal, *TWE*, p. 119

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



# Lesson Planning Guide (pp. 120-123)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Compute mentally with percents.

<b>NCTM Standards:</b> 1-5, 7, 10, 12
<b>New Mexico Mathematics Performance Standards Grades 5-8:</b> 7-A-1, 7-C-1

## 1 FOCUS

- \_\_\_\_\_ 5-Minute Check, *TWE*, p. 120
- \_\_\_\_\_ ⇨ Transparency 3-5A
- \_\_\_\_\_ Motivating the Lesson, Problem Solving, *TWE*, p. 120

## 2 TEACH

- \_\_\_\_\_ Transparency 3-5B
- \_\_\_\_\_ Reading Mathematics, *TWE*, p. 120
- \_\_\_\_\_ In-Class Examples, *TWE*, p. 121
- \_\_\_\_\_ ⇨ *Study Guide Masters*, p. 24
- \_\_\_\_\_ Reteaching the Lesson, *TWE*, p. 121
- \_\_\_\_\_ Error Analysis, *TWE*, p. 121
- \_\_\_\_\_ ⇨ *CD-ROM Program*, Resource Lesson 3-5

## 3 PRACTICE/APPLY

- \_\_\_\_\_ Check for Understanding, *SE*, pp. 121-122

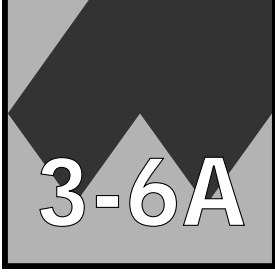
<b>Homework Assignments (p. 122)</b>	
_____ Core: 11-29 odd, 30-34	_____ Enriched: 10-26 even, 28-34
_____ Alternate Assignment: _____	

- \_\_\_\_\_ Extra Practice, *SE*, p. 613
- \_\_\_\_\_ ⇨ *Practice Masters*, p. 24
- \_\_\_\_\_ ⇨ *Science and Mathematics Lab Manual*, pp. 53-56

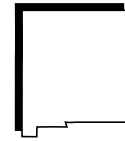
## 4 ASSESS

- \_\_\_\_\_ Let the Games Begin, *SE*, p. 123
- \_\_\_\_\_ Closing Activity, Writing, *TWE*, p. 122
- \_\_\_\_\_ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 72
- \_\_\_\_\_ Extending the Lesson, *TWE*, p. 122
- \_\_\_\_\_ ⇨ *Enrichment Masters*, p. 24

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# Lesson Planning Guide (pp. 124-125)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Determine whether answers to problems are reasonable.

### 1 FOCUS

\_\_\_\_\_ Getting Started, *TWE*, p. 124

### 2 TEACH

\_\_\_\_\_ In-Class Example, *TWE*, p. 124

\_\_\_\_\_ Reteaching the Lesson, *TWE*, p. 124

### 3 PRACTICE/APPLY

\_\_\_\_\_ Check for Understanding, *TWE*, p. 125

<b>NCTM Standards:</b> 1-5, 7
<b>New Mexico Mathematics Performance Standards Grades 5-8:</b> 1-A-1, 1-D-1, 1-F-2, 2-B-1, 3-A-1, 3-A-2, 3-C-1, 3-D-1, 7-B-1, 7-F-1

### Homework Assignments (p. 125)

\_\_\_\_\_ All: 4-14

\_\_\_\_\_ Alternate Assignment: \_\_\_\_\_

\_\_\_\_\_ Extra Practice, *SE*, p. 613

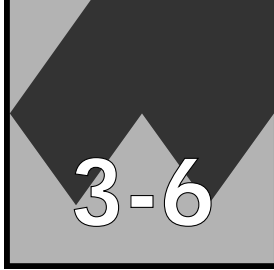
\_\_\_\_\_ Mixed Problem Solving, *SE*, pp. 645-646

### 4 ASSESS

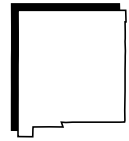
\_\_\_\_\_ Closing Activity, Writing, *TWE*, p. 125

\_\_\_\_\_ Extending the Lesson, *TWE*, p. 125

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



# Lesson Planning Guide (pp. 126-129)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_ M Tu W Th F

## Objectives

\_\_\_\_\_ Estimate by using equivalent fractions, decimals, and percents

<b>NCTM Standards:</b> 1-5, 7, 10, 12, 13
<b>New Mexico Mathematics Performance Standards</b> <b>Grades 5-8:</b> 7-C-2, 7-E-1, 7-F-1

## 1 FOCUS

- \_\_\_\_\_ 5-Minute Check, *TWE*, p. 126
- \_\_\_\_\_ ⇨ Transparency 3-6A
- \_\_\_\_\_ Motivating the Lesson, Communication, *TWE*, p. 126

## 2 TEACH

- \_\_\_\_\_ Transparency 3-6B
- \_\_\_\_\_ Using the Mini-Lab, *TWE*, p. 127
- \_\_\_\_\_ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 3-6
- \_\_\_\_\_ In-Class Examples, *TWE*, p. 127
- \_\_\_\_\_ ⇨ *Study Guide Masters*, p. 25
- \_\_\_\_\_ Reteaching the Lesson, *TWE*, p. 128
- \_\_\_\_\_ Error Analysis, *TWE*, p. 128
- \_\_\_\_\_ ⇨ *CD-ROM Program*, Resource Lesson 3-6, Interactive Lesson 3-6

## 3 PRACTICE/APPLY

- \_\_\_\_\_ Check for Understanding, *SE*, p. 128

<b>Homework Assignments (pp. 128-129)</b>	
_____ Core: 11-33 odd, 36-40	_____ Enriched: 12-30 even, 32-34, 36-40
_____ Optional: 35 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- \_\_\_\_\_ Extra Practice, *SE*, p. 614
- \_\_\_\_\_ ⇨ *Practice Masters*, p. 25
- \_\_\_\_\_ ⇨ *Science and Mathematics Lab Manual*, pp. 85-88

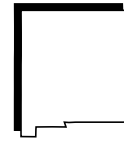
## 4 ASSESS

- \_\_\_\_\_ Closing Activity, Speaking, *TWE*, p. 129
- \_\_\_\_\_ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 72
- \_\_\_\_\_ Extending the Lesson, *TWE*, p. 129
- \_\_\_\_\_ ⇨ *Enrichment Masters*, p. 25

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# Review and Assessment (pp. 130-137)



Teacher's Name \_\_\_\_\_ Dates \_\_\_\_\_

Grade \_\_\_\_\_ Class \_\_\_\_\_

Review M Tu W Th F  
Testing M Tu W Th F

- \_\_\_\_\_ Study Guide and Assessment, *SE*, pp. 130-133
- \_\_\_\_\_ Standardized Test Practice, *SE*, pp. 134-135
- \_\_\_\_\_ Chapter Test, *SE*, p. 649

## ⇔ **Assessment and Evaluation Masters (pp. 57-75)**

### *Multiple-Choice Tests*

- \_\_\_\_\_ Form 1A, 1B, or 1C, pp. 57-62
- \_\_\_\_\_ Standardized Test Practice, pp. 73-74

### *Free-Response Tests*

- \_\_\_\_\_ Form 2A, 2B, or 2C, pp. 63-68
- \_\_\_\_\_ Performance Assessment, p. 69
- \_\_\_\_\_ Cumulative Review, p. 75

- \_\_\_\_\_ ⇔ *MindJogger Videoquizzes*, Chapter 3
- \_\_\_\_\_ ⇔ *Test and Review Software*
- \_\_\_\_\_ ⇔ *CD-ROM Assessment Game*
- \_\_\_\_\_ ⇔ *State Test Preparation CD-ROM*

## **Interdisciplinary Investigation, SE, pp. 136-137**

- \_\_\_\_\_ ⇔ *Interdisciplinary Investigation, TWE*, pp. 136-137
- \_\_\_\_\_ ⇔ *Investigations and Projects Masters*, pp. 1-4

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