

8 Exploring Ratio, Proportion, and Percent



Chapter Pacing Guide

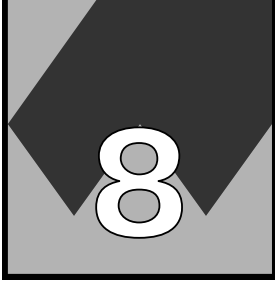
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

Day (Standard)	Day (Honors)	Lesson	Title
1	1	*Chapter Project	Theme: Toys The Wonderful World of Toys
2, 3, & 4	2 & 3	*8-1A	HANDS-ON LAB Cooperative Learning Ratios
		8-1	Ratios and Rates
5	4 & 5	*8-1B	HANDS-ON LAB Cooperative Learning Ratios and Probability
		8-2	Solving Proportions
6	6	8-2B	TECHNOLOGY LAB Spreadsheets Proportions
		8-3A	THINKING LAB Problem Solving Draw a Diagram
7	7	8-3	Integration: Geometry Scale Drawings
8 & 9	8	*8-4A	HANDS-ON LAB Cooperative Learning Modeling Percents
		8-4	Percents and Fractions
10	9	8-5	Percents and Decimals
11	10	8-6	Estimating with Percents
12	11	8-7	Percent of a Number
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, Park It!</i>, pp. 21-28 <i>Spanish Study Guide and Assessment 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 2 and 12</p>	<p>Applications <i>Family Letters and Activities</i>, pp. 15-16 <i>Spanish Family Letters and Activities</i>, pp. 15-16</p>



Chapter Project (pp. 308-309)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Use ratios and proportions to find and compare the size of toys and the actual size of the objects that they represent.
- _____ Make a poster to illustrate their findings.
- _____ State/local objectives: _____

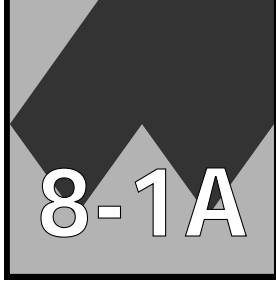
Theme: Toys

- _____ Chapter Project, *SE*, p. 309
- _____ Chapter 8 Notes, *TWE*, p. 308
- _____ Question of the Day, *TWE*, p. 308
- _____ ⇨ *Investigations and Projects Masters*, pp. 45-48

Homework Assignments

- _____ p. 315, Working on the Chapter Project, Exercise 35
- _____ p. 327, Working on the Chapter Project, Exercise 11
- _____ p. 333, Working on the Chapter Project, Exercise 37
- _____ p. 347, Completing the Chapter Project, Alternative Assessment

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



Lesson Planning Guide (pp. 310-311)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Students use tangram pieces to explore ratios and the relationship between ratio and area.

_____ State/local objectives: _____

NCTM Standards:
1, 3, 6-8, 10

MANAGEMENT

_____ Getting Started, *TWE*, p. 310

_____ ⇨ *Hands-On Lab Masters*, p. 15: tangram

ASSESS

_____ *TWE*, p. 311

_____ ⇨ *Hands-On Lab Masters*, p. 54

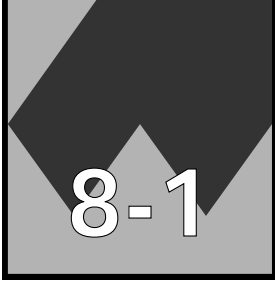
Class Activity (pp. 310-311)

_____ All: 1-4

_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 311

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Lesson Planning Guide (pp. 312-315)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Express ratios and rates as fractions.
- _____ State/local objectives: _____

NCTM Standards: 1, 3, 4, 6-10
South Carolina Math Curriculum Standards Grade 6: NO I.D.1., ALG I.A.1., GEO I.V.E.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 312
- _____ ⇨ Transparency 8-1A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 312

2 TEACH

- _____ ⇨ Transparency 8-1B
- _____ Thinking Algebraically, *TWE*, p. 313
- _____ In-Class Examples, *TWE*, p. 313
- _____ ⇨ *Study Guide Masters*, p. 57
- _____ Reteaching the Lesson, *TWE*, p. 313
- _____ Error Analysis, *TWE*, p. 313
- _____ ⇨ *CD-ROM Program*, Resource Lesson 8-1, Interactive Lesson 8-1
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 313

Homework Assignments (pp. 314-315)

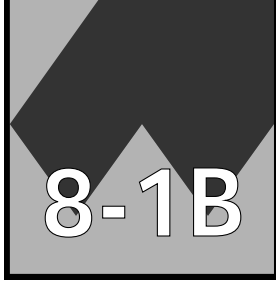
- _____ Core: 11-33 odd, 36-40 _____ Enriched: 12-30 even, 31-34, 36-40
- _____ Optional: 35 (Working on the Chapter Project)
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 578
- _____ ⇨ *Practice Masters*, p. 57
- _____ ⇨  *South Carolina Parent and Student Study Guide Workbook*, p. 64

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 315
- _____ Extending the Lesson, *TWE*, p. 315
- _____ ⇨ *Enrichment Masters*, p. 57

KEY	SE = Student Edition	TWE = Teacher's Wraparound Edition	⇨ = Other Program Components
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Lesson Planning Guide (p. 316)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Explore ratios and probability.
- _____ State/local objectives: _____

NCTM Standards:
1, 5-10

MANAGEMENT

- _____ Getting Started, *TWE*, p. 316
- _____ ⇨ *Hands-On Lab Masters*, p. 20: spinners
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 8-1B
- _____ ⇨ *Overhead Manipulative Resources*: spinners

ASSESS

- _____ *TWE*, p. 316
- _____ ⇨ *Hands-On Lab Masters*, p. 55

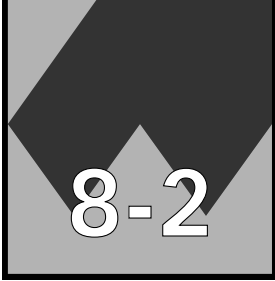
Class Activity (p. 316)

_____ All: 1-5

_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 316

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Lesson Planning Guide (pp. 317-320)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Solve proportions by using cross products.
- _____ State/local objectives: _____

NCTM Standards: 1-4, 6-10
South Carolina Math Curriculum Standards Grade 6: NO I.D.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 317
- _____ ⇨ Transparency 8-2A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 317

2 TEACH

- _____ ⇨ Transparency 8-2B
- _____ Using the Mini-Lab, *TWE*, p. 318
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 8-2
- _____ Multiple Learning Styles, Kinesthetic, *TWE*, p. 318
- _____ In-Class Examples, *TWE*, pp. 318-319
- _____ ⇨ *Study Guide Masters*, p. 58
- _____ Reteaching the Lesson, *TWE*, p. 319
- _____ ⇨ *CD-ROM Program*, Resource Lesson 8-2, Interactive Lesson 8-2

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 319

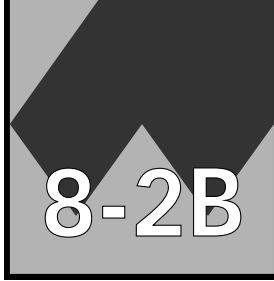
Homework Assignments (p. 320)	
_____ Core: 11-27 odd, 29-33	_____ Enriched: 10-24 even, 26-33
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 578
- _____ ⇨ *Practice Masters*, p. 58
- _____ ⇨ *School to Career Masters*, p. 8
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 65

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 320
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 211
- _____ Extending the Lesson, *TWE*, p. 320
- _____ ⇨ *Enrichment Masters*, p. 58

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Lesson Planning Guide (p. 321)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Use spreadsheets to solve problems involving proportions.
- _____ State/local objectives: _____

NCTM Standards: 1-4, 6-10
South Carolina Math Curriculum Standards Grade 6: ALG III.A.1.

MANAGEMENT

- _____ Getting Started, *TWE*, p. 321

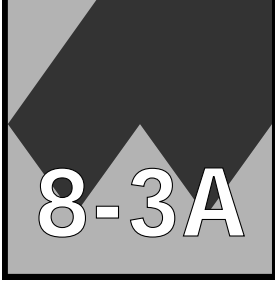
ASSESS

- _____ *TWE*, p. 321

Class Activity (p. 321)
_____ All: 1-4
_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 321

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Lesson Planning Guide (pp. 322-323)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Solve problems by drawing diagrams.
- _____ State/local objectives: _____

NCTM Standards:
1-4, 6-10

1 FOCUS

- _____ Getting Started, *TWE*, p. 322

2 TEACH

- _____ In-Class Examples, *TWE*, p. 322
- _____ Reteaching the Lesson, *TWE*, p. 322

3 PRACTICE/APPLY

- _____ Check for Understanding, *TWE*, p. 323

Homework Assignments (p. 323)

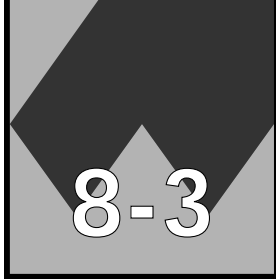
- _____ All: 5-14
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 578
- _____ Mixed Problem Solving, *SE*, pp. 593-594

4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 323
- _____ Extending the Lesson, *TWE*, p. 323

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Lesson Planning Guide (pp. 324-328)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find actual length from a scale drawing.
- _____ State/local objectives: _____

NCTM Standards: 1-4, 6-10
South Carolina Math Curriculum Standards Grade 6: NO III.A.1., GEO IV.E.1., MEA II.E.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 324
- _____ ⇨ Transparency 8-3A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 324
- _____ Cross-Curriculum Cue, *TWE*, p. 324

2 TEACH

- _____ ⇨ Transparency 8-3B
- _____ Reading Mathematics, *TWE*, p. 325
- _____ In-Class Examples, *TWE*, p. 325
- _____ ⇨ *Study Guide Masters*, p. 59
- _____ Reteaching the Lesson, *TWE*, p. 325
- _____ Error Analysis, *TWE*, p. 325
- _____ ⇨ *CD-ROM Program*, Resource Lesson 8-3

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 325

Homework Assignments (pp. 326-327)	
_____ Core: 5, 7, 9, 12-14	_____ Enriched: 6, 8-10, 12-14
_____ Optional: 11 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 579
- _____ ⇨ *Practice Masters*, p. 59
- _____ ⇨ *Technology Masters*, Graphing Calculator Activity, p. 16
- _____ School to Career Activity, *SE*, p. 328
- _____ Family Activity, *SE*, p. 326
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 66

4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 327
- _____ Extending the Lesson, *TWE*, p. 327
- _____ ⇨ *Enrichment Masters*, p. 59
- _____ Mid-Chapter Self Test, *SE*, p. 327

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Lesson Planning Guide (p. 329)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Illustrate the meaning of percent using models.
- _____ State/local objectives: _____

NCTM Standards:
1, 6-10

MANAGEMENT

- _____ Getting Started, *TWE*, p. 329
- _____ ⇨ *Hands-On Lab Masters*, p. 11: grid paper
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 8-4A
- _____ ⇨ *Overhead Manipulative Resources*: decimal models

ASSESS

- _____ *TWE*, p. 329
- _____ ⇨ *Hands-On Lab Masters*, p. 56

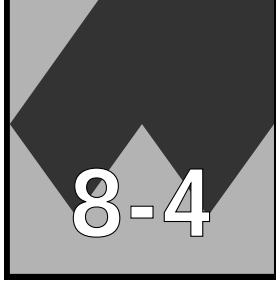
Class Activity (p. 329)

_____ All: 1-4

_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 329

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Lesson Planning Guide (pp. 330-333)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Express percents as fractions and vice versa.
- _____ State/local objectives: _____

NCTM Standards: 1, 2, 5-10
South Carolina Math Curriculum Standards Grade 6: NO I.A.1., NO I.C.1., MEA I.C.2., MEA II.A.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 330
- _____ ⇨ Transparency 8-4A
- _____ Motivating the Lesson, Communication, *TWE*, p. 331

2 TEACH

- _____ ⇨ Transparency 8-4B
- _____ Using the Mini-Lab, *TWE*, p. 331
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 8-4
- _____ In-Class Examples, *TWE*, p. 331
- _____ ⇨ *Study Guide Masters*, p. 60
- _____ Reteaching the Lesson, *TWE*, p. 332
- _____ Error Analysis, *TWE*, p. 332
- _____ ⇨ *CD-ROM Program*, Resource Lesson 8-4, Interactive Lesson 8-4

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 332

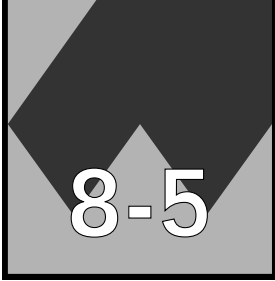
Homework Assignments (pp. 332-333)	
_____ Core: 11-35 odd, 38-43	_____ Enriched: 12-34 even, 35, 36, 38-43
_____ Optional: 37 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 579
- _____ ⇨ *Practice Masters*, p. 60
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 67

4 ASSESS

- _____ Closing Activity, Act It Out, *TWE*, p. 333
- _____ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 210
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 211
- _____ Extending the Lesson, *TWE*, p. 333
- _____ ⇨ *Enrichment Masters*, p. 60

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Lesson Planning Guide (pp. 334-336)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Express percents as decimals and vice versa.
- _____ State/local objectives: _____

NCTM Standards: 1-10
South Carolina Math Curriculum Standards Grade 6: NO I.A.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 334
- _____ ⇨ Transparency 8-5A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 334

2 TEACH

- _____ ⇨ Transparency 8-5B
- _____ In-Class Examples, *TWE*, p. 335
- _____ ⇨ *Study Guide Masters*, p. 61
- _____ Reteaching the Lesson, *TWE*, p. 335
- _____ Error Analysis, *TWE*, p. 335
- _____ ⇨ *CD-ROM Program*, Resource Lesson 8-5

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 335

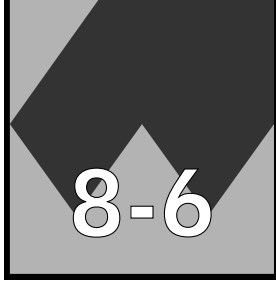
Homework Assignments (p. 336)	
_____ Core: 13-41 odd, 42-47	_____ Enriched: 14-38 even, 40-47
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 579
- _____ ⇨ *Practice Masters*, p. 61
- _____ ⇨ *Science and Mathematics Lab Manual*, pp. 81-84
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 68

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 336
- _____ Extending the Lesson, *TWE*, p. 336
- _____ ⇨ *Enrichment Masters*, p. 61

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Lesson Planning Guide (pp. 337-339)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Estimate the percent of a number.
- _____ State/local objectives: _____

NCTM Standards: 1, 2, 5-10
South Carolina Math Curriculum Standards Grade 6: GEO IV.E.1., MEA I.C.2., MEA II.A.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 337
- _____ ⇨ Transparency 8-6A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 337

2 TEACH

- _____ ⇨ Transparency 8-6B
- _____ Using Applications, *TWE*, p. 337
- _____ Multiple Learning Styles, Intrapersonal, *TWE*, p. 337
- _____ In-Class Examples, *TWE*, p. 338
- _____ ⇨ *Study Guide Masters*, p. 62
- _____ Reteaching the Lesson, *TWE*, p. 338
- _____ Error Analysis, *TWE*, p. 338
- _____ ⇨ *CD-ROM Program*, Resource Lesson 8-6, Interactive Lesson 8-6

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 338

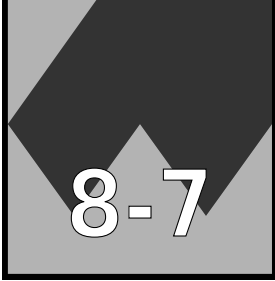
Homework Assignments (pp. 338-339)	
_____ Core: 11-29 odd, 31-35	_____ Enriched: 10-26 even, 28-35
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 580
- _____ ⇨ *Practice Masters*, p. 62
- _____ ⇨ *Hands-On Lab Masters*, p. 76
- _____ ⇨ *Diversity Masters*, p. 8
- _____ ⇨ *Science and Mathematics Lab Manual*, pp. 85-88
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 69

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 339
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 212
- _____ Extending the Lesson, *TWE*, p. 339
- _____ ⇨ *Enrichment Masters*, p. 62

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Lesson Planning Guide (pp. 340-343)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find the percent of a number.
- _____ State/local objectives: _____

NCTM Standards: 1-10
South Carolina Math Curriculum Standards Grade 6: NO I.C.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 340
- _____ ⇨ Transparency 8-7A
- _____ Motivating the Lesson, Communication, *TWE*, p. 340

2 TEACH

- _____ ⇨ Transparency 8-7B
- _____ Using Problem Solving, *TWE*, p. 341
- _____ Multiple Learning Styles, Logical, *TWE*, p. 341
- _____ In-Class Examples, *TWE*, p. 341
- _____ ⇨ *Study Guide Masters*, p. 63
- _____ Reteaching the Lesson, *TWE*, p. 342
- _____ ⇨ *CD-ROM Program*, Resource Lesson 8-7, Interactive Lesson 8-7

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 342

Homework Assignments (pp. 342-343)

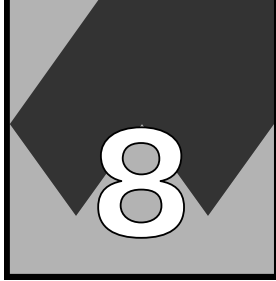
- | | |
|-----------------------------------|-----------------------------------|
| _____ Core: 9-25 odd, 27-30 | _____ Enriched: 10-24 even, 25-30 |
| _____ Alternate Assignment: _____ | |

- _____ Extra Practice, *SE*, p. 580
- _____ ⇨ *Practice Masters*, p. 63
- _____ ⇨ *Technology Masters*, Calculator Activity, p. 15
- _____ ⇨ *Classroom Games*, pp. 21-22
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 70

4 ASSESS

- _____ Let the Games Begin, *SE*, p. 343
- _____ Closing Activity, Speaking, *TWE*, p. 343
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 212
- _____ Extending the Lesson, *TWE*, p. 343
- _____ ⇨ *Enrichment Masters*, p. 63

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Review and Assessment (pp. 344-349)



Teacher's Name _____ Dates _____

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



- _____ Study Guide and Assessment, *SE*, pp. 344-347
- _____ Standardized Test Practice, *SE*, pp. 348-349
- _____ Chapter Test, *SE*, p. 602

⇨ **Assessment and Evaluation Masters (pp. 197-215)**

Multiple-Choice Tests

Free-Response Tests

- | | |
|---|---------------------------------------|
| _____ Form 1A, 1B, or 1C, pp. 197-202 | _____ Form 2A, 2B, or 2C, pp. 203-208 |
| _____ Standardized Test Practice, pp. 213-214 | _____ Performance Assessment, p. 209 |
| | _____ Cumulative Review, p. 215 |

- _____ ⇨ *MindJogger Videoquizzes*, Chapter 8
- _____ ⇨ *Test and Review Software*
- _____ ⇨ *CD-ROM Assessment Game*
- _____ ⇨ *State Test Preparation CD-ROM*
- _____ ⇨  *South Carolina Parent and Student Study Guide Workbook*, p. 71
- _____ ⇨  *South Carolina PACT Workbook and Test Preparation, Grade 6*

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