



10 Geometry: Understanding Area and Volume

Chapter Pacing Guide

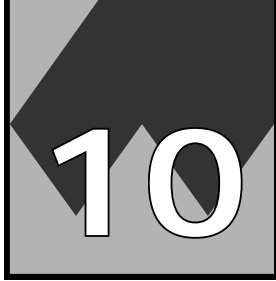
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

<i>Day (Standard)</i>	<i>Day (Honors)</i>	<i>Lesson</i>	<i>Title</i>
1	1	*Chapter Project	Theme: Measurement Measuring Up
2 & 3		*10-1A	<small>HANDS-ON LAB</small> Cooperative Learning Area of Irregular Shapes
	2	10-1	Area of Parallelograms
4	3	10-2	Area of Triangles
5 & 6	4 & 5	10-3	Area of Circles
		*10-3B	<small>HANDS-ON LAB</small> Cooperative Learning Making Circle Graphs
7 & 8	6 & 7	10-4	Three-Dimensional Figures
		*10-4B	<small>HANDS-ON LAB</small> Cooperative Learning Three-Dimensional Figures
9	8	10-5A	<small>THINKING LAB</small> Problem Solving Make a Model
10	9	10-5	Volume of Rectangular Prisms
11	10 & 11	10-6	Surface Area of Rectangular Prisms
		10-6B	<small>TECHNOLOGY LAB</small> Spreadsheets Surface Area and Volume
12	12	Review: Study Guide and Assessment	
13	13	Assessment: Chapter Test	

* Optional

Chapter Resources

<p>Meeting Individual Needs <i>Investigations for the Special Education Student</i>, Exploring the Depths of the Sea, pp. 43-44 <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 3 and 4</p>	<p>Applications <i>Family Letters and Activities</i>, pp. 19-20 <i>Spanish Family Letters and Activities</i>, pp. 19-20</p>



Chapter Project (pp. 394-395)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Develop a new system of measure.
- _____ Compare their system with a standard system.
- _____ State/local objectives: _____

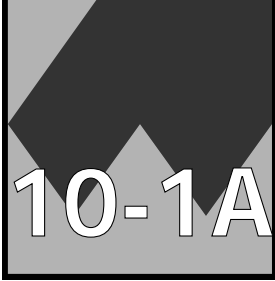
Theme: Measurement

- _____ Chapter Project, *SE*, p. 395
- _____ Chapter 10 Notes, *TWE*, p. 394
- _____ Question of the Day, *TWE*, p. 394
- _____ ⇨ *Investigations and Projects Masters*, pp. 53-56

Homework Assignments

- _____ p. 420, Working on the Chapter Project, Exercise 17
- _____ p. 424, Working on the Chapter Project, Exercise 22
- _____ p. 429, Completing the Chapter Project, Alternative Assessment

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



Lesson Planning Guide (pp. 396-397)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Students find the areas of irregular shapes.
- _____ State/local objectives: _____

NCTM Standards: 1, 3, 4, 6-10
South Carolina Math Curriculum Standards Grade 6: MEA I.C.2., MEA II.A.1., MEA II.A.2

MANAGEMENT

- _____ Getting Started, *TWE*, p. 396
- _____ ⇨ *Hands-On Lab Masters*, p. 12: centimeter grid
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 10-1A
- _____ ⇨ *Overhead Manipulative Resources*: centimeter grid

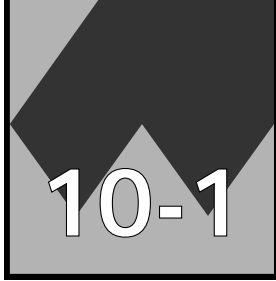
ASSESS

- _____ *TWE*, p. 397
- _____ ⇨ *Hands-On Lab Masters*, p. 61

Class Activity (pp. 396-397)
_____ All: 1-11
_____ Alternate Assignment:

- _____ Math Journal, *TWE*, p. 397

KEY	SE = Student Edition	TWE = Teacher's Wraparound Edition	⇨ = Other Program Components
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Lesson Planning Guide (pp. 398-401)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find the area of parallelograms.
- _____ State/local objectives: _____

NCTM Standards: 1-4, 6-10
South Carolina Math Curriculum Standards
Grade 6: GEO IV.E.1., MEA I.C.2., MEA II.A.1., MEA II.C.1., MEA II.C.2.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 398
- _____ ⇨ Transparency 10-1A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 399

2 TEACH

- _____ ⇨ Transparency 10-1B
- _____ Using the Mini-Lab, *TWE*, p. 399
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 10-1
- _____ Multiple Learning Styles, Kinesthetic, *TWE*, p. 399
- _____ In-Class Examples, *TWE*, pp. 399-400
- _____ ⇨ *Study Guide Masters*, p. 70
- _____ Reteaching the Lesson, *TWE*, p. 400
- _____ ⇨ *CD-ROM Program*, Resource Lesson 10-1, Interactive Lesson 10-1
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 400

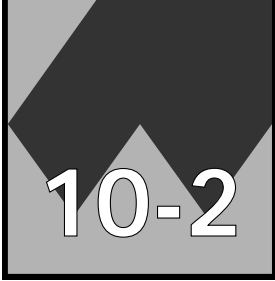
Homework Assignments (pp. 400-401)	
_____ Core: 7-15 odd, 17-19	_____ Enriched: 8-14 even, 15-19
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 583
- _____ ⇨ *Practice Masters*, p. 70
- _____ ⇨ *Technology Masters*, Spreadsheet Activity, p. 20
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 79

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 401
- _____ Extending the Lesson, *TWE*, p. 401
- _____ ⇨ *Enrichment Masters*, p. 70

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Lesson Planning Guide (pp. 402-405)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find the area of triangles.
- _____ State/local objectives: _____

NCTM Standards: 1-4, 6-10
South Carolina Math Curriculum Standards
Grade 6: GEO IV.E.1., MEA I.C.2., MEA II.A.1., MEA II.C.1., MEA II.C.2.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 402
- _____ ⇨ Transparency 10-2A
- _____ Motivating the Lesson, Communication, *TWE*, p. 402
- _____ Cross-Curriculum Cue, *TWE*, p. 402

2 TEACH

- _____ ⇨ Transparency 10-2B
- _____ Using the Mini-Lab, *TWE*, p. 403
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 10-2
- _____ In-Class Examples, *TWE*, p. 403
- _____ ⇨ *Study Guide Masters*, p. 71
- _____ Reteaching the Lesson, *TWE*, p. 404
- _____ ⇨ *CD-ROM Program*, Resource Lesson 10-2, Interactive Lesson 10-2

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 404

Homework Assignments (pp. 404-405)

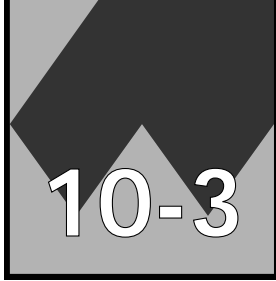
- | | |
|-----------------------------------|-----------------------------------|
| _____ Core: 9-23 odd, 24-27 | _____ Enriched: 10-18 even, 20-27 |
| _____ Alternate Assignment: _____ | |

- _____ Extra Practice, *SE*, p. 583
- _____ ⇨ *Practice Masters*, p. 71
- _____ ⇨ *Hands-On Lab Masters*, p. 78
- _____ ⇨ *Science and Mathematics Lab Manual*, pp. 17-20
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 80

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 405
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 267
- _____ Extending the Lesson, *TWE*, p. 405
- _____ ⇨ *Enrichment Masters*, p. 71

KEY	SE = Student Edition	TWE = Teacher's Wraparound Edition	⇨ = Other Program Components
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Lesson Planning Guide (pp. 406-409)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find the area of circles.
- _____ State/local objectives: _____

NCTM Standards: 1-4, 6-10
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. 406
- _____ ⇨ Transparency 10-3A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 406
- _____ Multiple Learning Styles, Auditory/Musical, *TWE*, p. 406

2 TEACH

- _____ ⇨ Transparency 10-3B
- _____ Using the Mini-Lab, *TWE*, p. 407
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 10-3
- _____ In-Class Examples, *TWE*, p. 407
- _____ ⇨ *Study Guide Masters*, p. 72
- _____ Reteaching the Lesson, *TWE*, p. 408
- _____ Error Analysis, *TWE*, p. 408
- _____ ⇨ *CD-ROM Program*, Resource Lesson 10-3

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 407-408

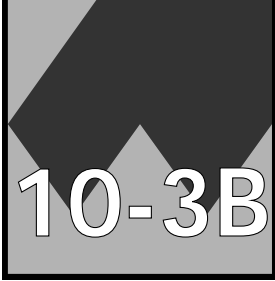
Homework Assignments (pp. 408-409)	
_____ Core: 9-23 odd, 25-28	_____ Enriched: 10-22 even, 23-28
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 583
- _____ ⇨ *Practice Masters*, p. 72
- _____ ⇨ *Technology Masters*, Calculator Activity, p. 19
- _____ ⇨ *Classroom Games*, pp. 27-28
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 81

4 ASSESS

- _____ Let the Games Begin, *SE*, p. 409
- _____ Closing Activity, Modeling, *TWE*, p. 409
- _____ Extending the Lesson, *TWE*, p. 409
- _____ ⇨ *Enrichment Masters*, p. 72
- _____ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 266
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 267

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Lesson Planning Guide (pp. 410-411)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Construct circle graphs.
- _____ State/local objectives: _____

NCTM Standards: 1, 3-10
South Carolina Math Curriculum Standards
Grade 6: GEO IV.E.1., MEA I.C.1., MEA I.C.2., MEA II.B.1., DAP I.B.1.

MANAGEMENT

- _____ Getting Started, *TWE*, p. 410
- _____ ⇨ *Hands-On Lab Masters*, p. 29: circle graph template; p. 22: protractor
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 10-3B
- _____ ⇨ *Overhead Manipulative Resources*: compass, protractor

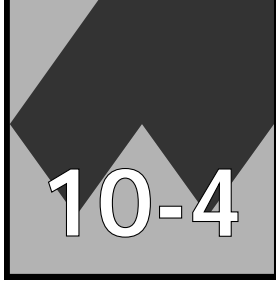
ASSESS

- _____ *TWE*, p. 411
- _____ ⇨ *Hands-On Lab Masters*, p. 62

Class Activity (pp. 410-411)
_____ All: 1-7
_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 411

KEY	SE = Student Edition	TWE = Teacher's Wraparound Edition	⇨ = Other Program Components
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Lesson Planning Guide (pp. 412-414)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Identify three-dimensional figures.
- _____ State/local objectives: _____

NCTM Standards: 1, 3, 4, 6-10
South Carolina Math Curriculum Standards
Grade 6: GEO I.A.1., GEO I.V.E.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 412
- _____ ⇨ Transparency 10-4A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 412

2 TEACH

- _____ ⇨ Transparency 10-4B
- _____ Reading Mathematics, *TWE*, p. 413
- _____ In-Class Examples, *TWE*, p. 413
- _____ ⇨ *Study Guide Masters*, p. 73
- _____ Reteaching the Lesson, *TWE*, p. 43
- _____ Error Analysis, *TWE*, p. 413
- _____ ⇨ *CD-ROM Program*, Resource Lesson 10-4, Interactive Lesson 10-4

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 413

Homework Assignments (pp. 413-414)

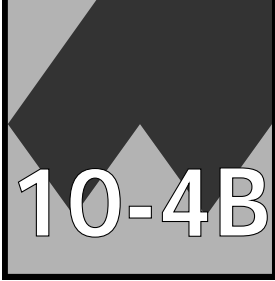
- _____ Core: 9-21 odd, 22-25
- _____ Enriched: 10-18 even, 20-25
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 584
- _____ ⇨ *Practice Masters*, p. 73
- _____ ⇨ *Diversity Masters*, p. 10
- _____ Family Activity, *SE*, p. 414
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 82

4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 414
- _____ Extending the Lesson, *TWE*, p. 414
- _____ ⇨ *Enrichment Masters*, p. 73
- _____ Mid-Chapter Self Test, *SE*, p. 414

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Lesson Planning Guide (p. 415)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Draw three-dimensional figures.
- _____ State/local objectives: _____

NCTM Standards: 3, 6-8, 10
South Carolina Math Curriculum Standards Grade 6: GEO I.A.1.

MANAGEMENT

- _____ Getting Started, *TWE*, p. 415
- _____ ⇨ *Hands-On Lab Masters*, p. 14: isometric dot paper
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 10-4B
- _____ ⇨ *Overhead Manipulative Resources*: isometric dot paper

ASSESS

- _____ *TWE*, p. 415
- _____ ⇨ *Hands-On Lab Masters*, p. 63

Class Activity (p. 415)
_____ All: 1-6
_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 415

KEY	SE = Student Edition	TWE = Teacher's Wraparound Edition	⇨ = Other Program Components
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10-5A

Lesson Planning Guide (pp. 416-417)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Solve problems by making models.
- _____ State/local objectives: _____

NCTM Standards: 1-4, 6-10
South Carolina Math Curriculum Standards Grade 6: ALG I.A.1., GEO I.A.1., GEO IV.B.1., GEO IV.E.1., MEA I.C.2., MEA II.A.1.

1 FOCUS

- _____ Getting Started, *TWE*, p. 416

2 TEACH

- _____ In-Class Examples, *TWE*, p. 416
- _____ Reteaching the Lesson, *TWE*, p. 416

3 PRACTICE/APPLY

- _____ Check for Understanding, *TWE*, p. 417

Homework Assignments (p. 417)

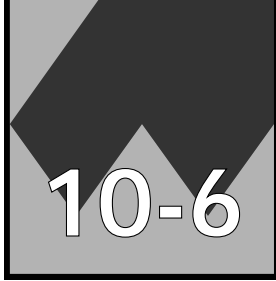
- _____ All: 3-12
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 584
- _____ Mixed Problem Solving, *SE*, pp. 593-594

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 417
- _____ Extending the Lesson, *TWE*, p. 417

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



Lesson Planning Guide (pp. 421-424)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find the surface area of rectangular prisms.
- _____ State/local objectives: _____

NCTM Standards: 1, 3, 4, 6-10
South Carolina Math Curriculum Standards
Grade 6: GEO I.A.1., GEO I.V.E.1., MEA I.C.2., MEA II.A.1., MEA II.B.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 421
- _____ ⇨ Transparency 10-6A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 421

2 TEACH

- _____ ⇨ Transparency 10-6B
- _____ Using the Mini-Lab, *TWE*, p. 422
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 10-6
- _____ In-Class Examples, *TWE*, p. 422
- _____ ⇨ *Study Guide Masters*, p. 75
- _____ Reteaching the Lesson, *TWE*, p. 422
- _____ Error Analysis, *TWE*, p. 422
- _____ ⇨ *CD-ROM Program*, Resource Lesson 10-6, Interactive Lesson 10-6

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 423

Homework Assignments (pp. 423-424)

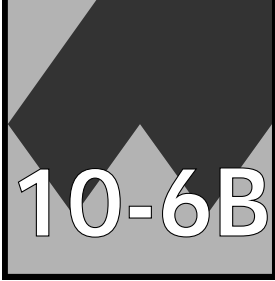
- _____ Core: 9-21 odd, 23-26 _____ Enriched: 8-18 even, 20, 21, 23-26
- _____ Optional: 22 (Working on the Chapter Project)
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 585
- _____ ⇨ *Practice Masters*, p. 75
- _____ ⇨ *School to Career Masters*, p. 10
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 84

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 424
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 268
- _____ Extending the Lesson, *TWE*, p. 424
- _____ ⇨ *Enrichment Masters*, p. 75

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Lesson Planning Guide (p. 425)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Use spreadsheets to find the surface area and volume of rectangular prisms.

_____ State/local objectives: _____

NCTM Standards:

1-4, 6-9

South Carolina Math Curriculum Standards

Grade 6: ALG III.A.1., GEO I.A.1., GEO IV.E.1., MEA I.C.2., MEA II.A.1.

MANAGEMENT

_____ Getting Started, *TWE*, p. 425

ASSESS

_____ *TWE*, p. 425

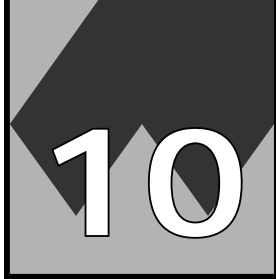
Class Activity (p. 425)

_____ All: 1-6

_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 425

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



Review and Assessment (pp. 426-431)



Teacher's Name _____ Dates _____

Grade _____ Class _____

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



- _____ Study Guide and Assessment, *SE*, pp. 426-429
- _____ Standardized Test Practice, *SE*, pp. 430-431
- _____ Chapter Test, *SE*, p. 604

⇨ Assessment and Evaluation Masters (pp. 253-271)

Multiple-Choice Tests

Free-Response Tests

- | | |
|---|---------------------------------------|
| _____ Form 1A, 1B, or 1C, pp. 253-258 | _____ Form 2A, 2B, or 2C, pp. 259-264 |
| _____ Standardized Test Practice, pp. 269-270 | _____ Performance Assessment, p. 265 |
| | _____ Cumulative Review, p. 271 |

- _____ ⇨ *MindJogger Videoquizzes*, Chapter 10
- _____ ⇨ *Test and Review Software*
- _____ ⇨ *CD-ROM Assessment Game*
- _____ ⇨ *State Test Preparation CD-ROM*
- _____ ⇨  *South Carolina Parent and Student Study Guide Workbook*, p. 85
- _____ ⇨  *South Carolina PACT Workbook and Test Preparation, Grade 6*

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