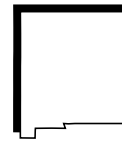


10 Geometry: Understanding Area and Volume



Chapter Pacing Guide

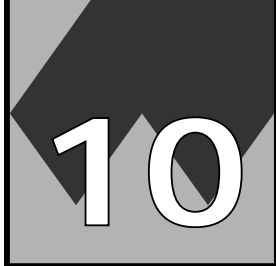
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

Day (Standard)	Day (Honors)	Lesson	Title
1	1	*Chapter Project	Theme: Measurement Measuring Up
2 & 3		*10-1A	HANDS-ON LAB 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	HANDS-ON LAB Cooperative Learning Making Circle Graphs
7 & 8	6 & 7	10-4	Three-Dimensional Figures
		*10-4B	HANDS-ON LAB Cooperative Learning Three-Dimensional Figures
9	8	10-5A	THINKING LAB 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	TECHNOLOGY LAB Spreadsheets Surface Area and Volume
12	12	Review: Study Guide and Assessment	
13	13	Assessment: Chapter Test	

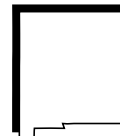
* Optional

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.

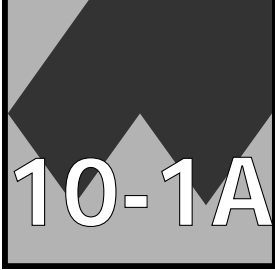
Theme: Measurement

- _____ 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.

NCTM Standards:

1-4, 7, 12, 13

New Mexico Mathematics Performance Standards

Grades 5-8:

8-D-1

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

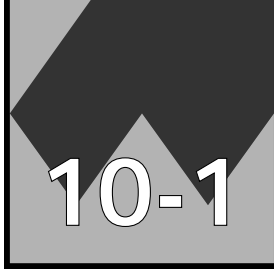
Class Activity (pp. 396-397)

_____ All: 1-11

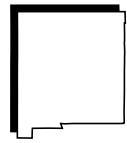
_____ Alternate Assignment:

_____ Math Journal, *TWE*, p. 397

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



Lesson Planning Guide (pp. 398-401)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find the area of parallelograms.

NCTM Standards: 1-7, 9, 12, 13
New Mexico Mathematics Performance Standards Grades 5-8: 7-E-3

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

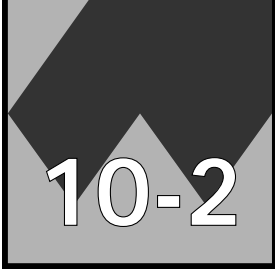
Homework Assignments (pp. 400-401)	
_____ Core: 7-15 odd, 17-19	_____ Enriched: 8-14 even, 15-19
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 583
- _____ ⇨ *Practice Masters*, p. 70
- _____ ⇨ *Technology Masters*, Spreadsheet Activity, p. 20

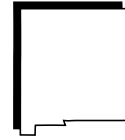
4 ASSESS

- _____ 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.

NCTM Standards:

1-9, 12, 13

New Mexico Mathematics Performance Standards

Grades 5-8:

2-D-2, 4-D-1, 7-E-3

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)

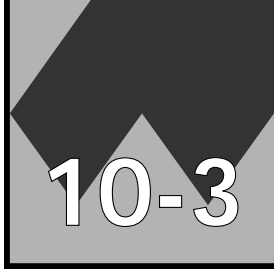
- _____ Core: 9-23 odd, 24-27
- _____ Enriched: 10-18 even, 20-27
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 583
- _____ ⇨ *Practice Masters*, p. 71
- _____ ⇨ *Hands-On Lab Masters*, p. 78
- _____ ⇨ *Science and Mathematics Lab Manual*, pp. 17-20

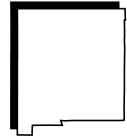
4 ASSESS

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

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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.

NCTM Standards:

1-9, 12, 13

New Mexico Mathematics Performance Standards

Grades 5-8:

2-D-2, 7-E-3

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

4 ASSESS

_____ Let the Games Begin, *SE*, p. 409

_____ Closing Activity, Modeling, *TWE*, p. 409

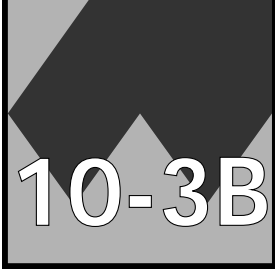
_____ Extending the Lesson, *TWE*, p. 409

_____ ⇨ *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.

NCTM Standards:

1-7, 10, 12, 13

New Mexico Mathematics Performance Standards

Grades 5-8:

2-D-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

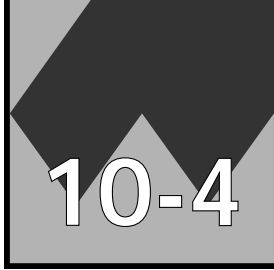
Class Activity (pp. 410-411)

_____ All: 1-7

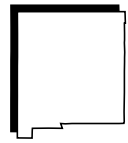
_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 411

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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.

NCTM Standards: 1-7, 12, 13
New Mexico Mathematics Performance Standards Grades 5-8: 2-A-3

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

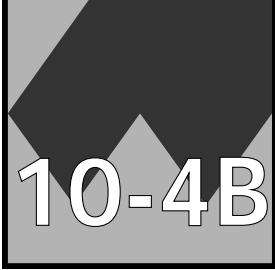
Homework Assignments (pp. 413-414)	
_____ Core: 9-21 odd, 22-25	_____ Enriched: 10-18 even, 20-25
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 584
- _____ ⇨ *Practice Masters*, p. 73
- _____ ⇨ *Diversity Masters*, p. 10
- _____ Family Activity, *SE*, p. 414

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.

NCTM Standards: 1-3, 12
New Mexico Mathematics Performance Standards Grades 5-8: 8-C-2, 9-C-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

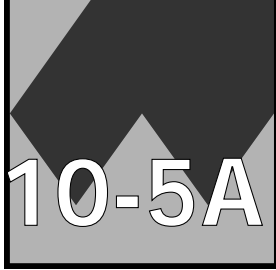
ASSESS

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

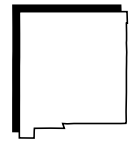
Class Activity (p. 415)
_____ All: 1-6
_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 415

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Lesson Planning Guide (pp. 416-417)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve problems by making models.

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

NCTM Standards: 1-9, 12, 13
New Mexico Mathematics Performance Standards Grades 5-8: 1-F-1, 4-C-1, 8-C-2, 9-C-1

Homework Assignments (p. 417)

_____ All: 3-12

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 584

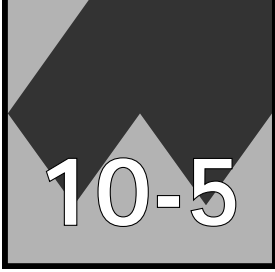
_____ Mixed Problem Solving, *SE*, pp. 593-594

4 ASSESS

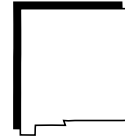
_____ Closing Activity, Writing, *TWE*, p. 417

_____ Extending the Lesson, *TWE*, p. 417

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Lesson Planning Guide (pp. 418-420)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find the volume of rectangular prisms.

NCTM Standards:

1-7, 9, 12, 13

New Mexico Mathematics Performance Standards

Grades 5-8:

7-E-3, 8-D-1, 9-A-1, 9-C-1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 418
- _____ ⇨ Transparency 10-5B
- _____ Motivating the Lesson, Communication, *TWE*, p. 418
- _____ Multiple Learning Styles, Naturalist, *TWE*, p. 418

2 TEACH

- _____ ⇨ Transparency 10-5B
- _____ Using the Mini-Lab, *TWE*, p. 418
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 10-5
- _____ In-Class Examples, *TWE*, p. 419
- _____ ⇨ *Study Guide Masters*, p. 74
- _____ Reteaching the Lesson, *TWE*, p. 419
- _____ ⇨ *CD-ROM Program*, Resource Lesson 10-5, Interactive Lesson 10-5

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 419-420

Homework Assignments (p. 420)

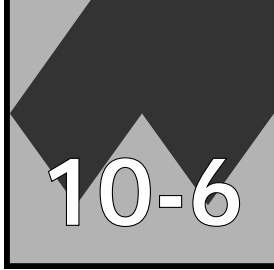
- _____ Core: 7-15 odd, 18-20 _____ Enriched: 8-14 even, 15, 16, 18-20
- _____ Optional: 17 (Working on the Chapter Project)
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 584
- _____ ⇨ *Practice Masters*, p. 74

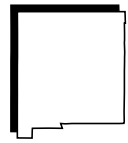
4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 420
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 268
- _____ Extending the Lesson, *TWE*, p. 420
- _____ ⇨ *Enrichment Masters*, p. 74

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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.

NCTM Standards: 1-7, 12, 13
New Mexico Mathematics Performance Standards Grades 5-8: 2-D-1, 2-D-2, 4-C-1, 7-E-3, 8-D-1, 9-A-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

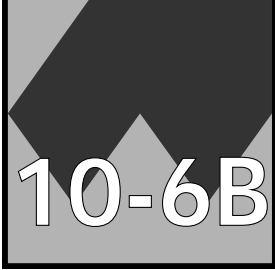
Homework Assignments (pp. 423-424)	
_____ Core: 9-21 odd, 23-26	_____ Enriched: 8-18 even, 20, 21, 23-26
_____ Optional: 22 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 585
- _____ ⇨ *Practice Masters*, p. 75
- _____ ⇨ *School to Career Masters*, p. 10

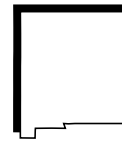
4 ASSESS

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

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

MANAGEMENT

_____ Getting Started, *TWE*, p. 425

ASSESS

_____ *TWE*, p. 425

NCTM Standards:

1-4, 7-9, 12, 13

New Mexico Mathematics Performance Standards

Grades 5-8:

1-E-1, 4-C-1, 7-E-3, 8-D-1,
9-A-1

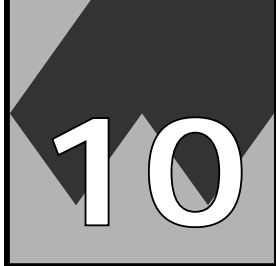
Class Activity (p. 425)

_____ All: 1-6

_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 425

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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

_____ Form 1A, 1B, or 1C, pp. 253-258

_____ Standardized Test Practice, pp. 269-270

Free-Response Tests

_____ Form 2A, 2B, or 2C, pp. 259-264

_____ 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*

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