

9 Geometry: Investigating 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: Architecture Designing a Dream House
2	2	9-1	Angles
3	3	9-1B	THINKING LAB Problem Solving Use Logical Reasoning
4	4	9-2	Using Angle Measures
5 & 6		*9-3A	HANDS-ON LAB Cooperative Learning Constructing Congruent Segments and Angles
	5	9-3	Constructing Bisectors
7, 8 & 9		*9-4A	HANDS-ON LAB Cooperative Learning Triangles and Quadrilaterals
	6 & 7	9-4	Two-Dimensional Figures
		*9-4B	HANDS-ON LAB Cooperative Learning Using Nets to Wrap a Cube
10	8	9-5	Lines of Symmetry
11 & 12	9 & 10	9-6	Size and Shape
		*9-6B	HANDS-ON LAB Cooperative Learning Translations and Escher Drawings
13	11	Review: Study Guide and Assessment	
14	12	Assessment: Chapter Test	

* Optional

Chapter Resources

<p>Meeting Individual Needs <i>Investigations for the Special Education Student</i>, Hide and Seek, p. 29 <i>Spanish Study Guide and Assessment</i> <i>Study Guide and Practice Workbook</i></p>	<p>Technology <i>Electronic Teacher's Classroom</i> Resources (ETCR) www.glencoe.com/sec/math/mac/mathnet</p>
<p>Interactive Mathematics: Activities and Investigations Units 4 and 12</p>	<p>Applications <i>Family Letters and Activities</i>, pp. 17-18 <i>Spanish Family Letters and Activities</i>, pp. 17-18</p>



Chapter Project (pp. 350-351)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Students use a scale drawing to find angle measures and wall lengths.

_____ State/local objectives: _____

Theme: Architecture

_____ Chapter Project, *SE*, p. 351

_____ Chapter 9 Notes, *TWE*, p. 350

_____ Question of the Day, *TWE*, p. 350

_____ ⇨ *Investigations and Projects Masters*, pp. 49-52

Homework Assignments

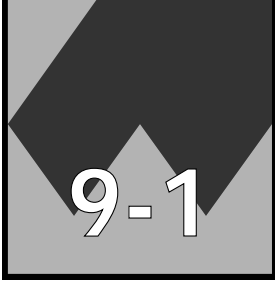
_____ p. 361, Working on the Chapter Project, Exercise 27

_____ p. 373, Working on the Chapter Project, Exercise 27

_____ p. 382, Working on the Chapter Project, Exercise 19

_____ p. 389, Completing the Chapter Project, Alternative Assessment

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



Lesson Planning Guide (pp. 352-355)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Classify and measure angles.
- _____ State/local objectives: _____

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

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 352
- _____ ⇨ Transparency 9-1A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 352
- _____ Cross-Curriculum Cue, *TWE*, p. 352

2 TEACH

- _____ ⇨ Transparency 9-1B
- _____ Reading Mathematics, *TWE*, p. 352
- _____ In-Class Examples, *TWE*, p. 353
- _____ ⇨ *Study Guide Masters*, p. 64
- _____ Reteaching the Lesson, *TWE*, p. 353
- _____ Error Analysis, *TWE*, p. 353
- _____ ⇨ *CD-ROM Program*, Resource Lesson 9-1

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 353-354

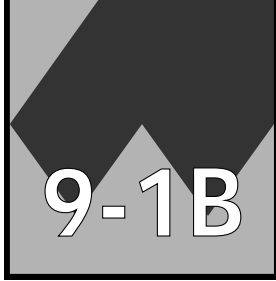
Homework Assignments (pp. 354-355)	
_____ Core: 11-31 odd, 33-38	_____ Enriched: 10-30 even, 31-38
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 580
- _____ ⇨ *Practice Masters*, p. 64
- _____ ⇨ *Technology Masters*, Spreadsheet Activity, p. 18
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 72

4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 355
- _____ Extending the Lesson, *TWE*, p. 355
- _____ ⇨ *Enrichment Masters*, p. 64

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Lesson Planning Guide (pp. 356-357)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Solve problems by using logical reasoning.
- _____ State/local objectives: _____

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

1 FOCUS

- _____ Getting Started, *TWE*, p. 356

2 TEACH

- _____ In-Class Examples, *TWE*, p. 356
- _____ Reteaching the Lesson, *TWE*, p. 356

3 PRACTICE/APPLY

- _____ Check for Understanding, *TWE*, p. 357

Homework Assignments (p. 357)

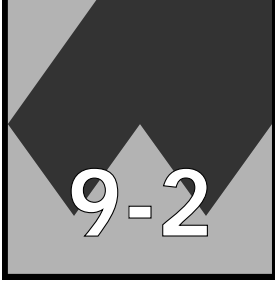
- _____ All: 5-13
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 581
- _____ Mixed Problem Solving, *SE*, pp. 593-594

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 357
- _____ Extending the Lesson, *TWE*, p. 357

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Lesson Planning Guide (pp. 358-361)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Draw angles and estimate measures of angles.
- _____ State/local objectives: _____

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

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 358
- _____ ⇨ Transparency 9-2A
- _____ Motivating the Lesson, Communication, *TWE*, p. 358

2 TEACH

- _____ ⇨ Transparency 9-2B
- _____ Using the Mini-Lab, *TWE*, p. 359
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 9-2
- _____ Multiple Learning Styles, Verbal/Linguistic, *TWE*, p. 359
- _____ In-Class Examples, *TWE*, pp. 359-360
- _____ ⇨ *Study Guide Masters*, p. 65
- _____ Reteaching the Lesson, *TWE*, p. 360
- _____ ⇨ *CD-ROM Program*, Resource Lesson 9-2, Interactive Lesson 9-2
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 360

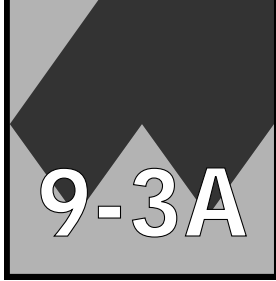
Homework Assignments (p. 361)	
_____ Core: 11-25 odd, 28-32	_____ Enriched: 10-24 even, 25, 26, 28-32
_____ Optional: 27 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 581
- _____ ⇨ *Practice Masters*, p. 65
- _____ ⇨ *Technology Masters*, Calculator Activity, p. 17
- _____ ⇨ *School to Career Masters*, p. 9
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 73

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 361
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 239
- _____ Extending the Lesson, *TWE*, p. 361
- _____ ⇨ *Enrichment Masters*, p. 65

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Lesson Planning Guide (pp. 362-363)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Construct congruent segments and angles.
- _____ State/local objectives: _____

NCTM Standards:
1, 3, 4, 6-8, 10

MANAGEMENT

- _____ Getting Started, *TWE*, p. 362
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 9-3A
- _____ ⇨ *Overhead Manipulative Resources*: compass

ASSESS

- _____ *TWE*, p. 363
- _____ ⇨ *Hands-On Lab Masters*, p. 57

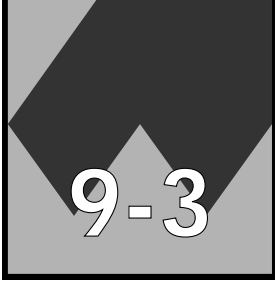
Class Activity (pp. 362-363)

_____ All: 1-8

_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 363

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



Lesson Planning Guide (pp. 364-367)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Bisect line segments and angles.
- _____ State/local objectives: _____

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

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 364
- _____ ⇨ Transparency 9-3A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 364

2 TEACH


- _____ ⇨ Transparency 9-3B
- _____ Using the Mini-Lab, *TWE*, p. 365
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 9-3
- _____ In-Class Examples, *TWE*, p. 365
- _____ ⇨ *Study Guide Masters*, p. 66
- _____ Reteaching the Lesson, *TWE*, p. 365
- _____ Error Analysis, *TWE*, p. 365
- _____ ⇨ *CD-ROM Program*, Resource Lesson 9-3

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 366

Homework Assignments (p. 366)

- _____ Core: 9-17 odd, 19-22
- _____ Enriched: 8-16 even, 17-22
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 581
- _____ ⇨ *Practice Masters*, p. 66
- _____ School to Career Activity, *SE*, p. 367
- _____ ⇨  *South Carolina Parent and Student Study Guide Workbook*, p. 74

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 366
- _____ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 238
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 239
- _____ Extending the Lesson, *TWE*, p. 366
- _____ ⇨ *Enrichment Masters*, p. 66

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Lesson Planning Guide (pp. 368-369)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Classify triangles and quadrilaterals.
- _____ State/local objectives: _____

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

MANAGEMENT

- _____ Getting Started, *TWE*, p. 368
- _____ ⇨ *Hands-On Lab Masters*, p. 13: square dot paper
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 9-4A
- _____ ⇨ *Overhead Manipulative Resources*: geoboards, geobands, rectangular dot paper

ASSESS

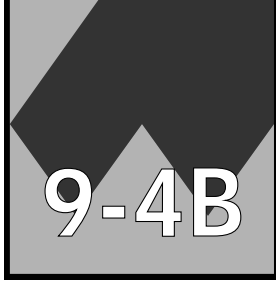
- _____ *TWE*, p. 369
- _____ ⇨ *Hands-On Lab Masters*, p. 58

Class Activity (pp. 368-369)

- _____ All: 1-8
- _____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 369

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Lesson Planning Guide (p. 374)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Make a net and use it to wrap a cube.
- _____ State/local objectives: _____

NCTM Standards:
3, 6-8, 10

MANAGEMENT

- _____ Getting Started, *TWE*, p. 374
- _____ ⇨ *Hands-On Lab Masters*, p. 21: cube pattern

ASSESS

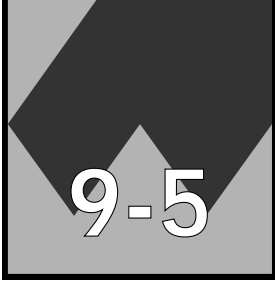
- _____ *TWE*, p. 374
- _____ ⇨ *Hands-On Lab Masters*, p. 59

Class Activity (p. 374)

- _____ All: 1-4
- _____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 374

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Lesson Planning Guide (pp. 375-378)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Describe and define lines of symmetry.
- _____ State/local objectives: _____

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

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 375
- _____ ⇨ Transparency 9-5A
- _____ Motivating the Lesson, Communication, *TWE*, p. 375
- _____ Multiple Learning Styles, Interpersonal, *TWE*, p. 375

2 TEACH


- _____ ⇨ Transparency 9-5B
- _____ Using the Mini-Lab, *TWE*, p. 377
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 9-5
- _____ In-Class Examples, *TWE*, p. 376
- _____ ⇨ *Study Guide Masters*, p. 68
- _____ Reteaching the Lesson, *TWE*, p. 377
- _____ Error Analysis, *TWE*, p. 377
- _____ ⇨ *CD-ROM Program*, Resource Lesson 9-5, Interactive Lesson 9-5

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 376-377

Homework Assignments (pp. 377-378)

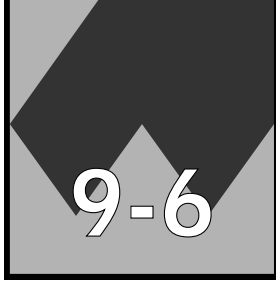
- _____ Core: 13-37 odd, 38-43
- _____ Enriched: 14-34 even, 36-43
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 582
- _____ ⇨ *Practice Masters*, p. 68
- _____ ⇨ *Hands-On Lab Masters*, p. 77
- _____ ⇨  *South Carolina Parent and Student Study Guide Workbook*, p. 76

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 378
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 240
- _____ Extending the Lesson, *TWE*, p. 378
- _____ ⇨ *Enrichment Masters*, p. 68

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Lesson Planning Guide (pp. 379-383)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Determine congruence and similarity.
- _____ State/local objectives: _____

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

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 379
- _____ ⇨ Transparency 9-6A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 379

2 TEACH

- _____ ⇨ Transparency 9-6B
- _____ Using the Mini-Lab, *TWE*, p. 380
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 9-6
- _____ Multiple Learning Styles, Intrapersonal, *TWE*, p. 379
- _____ In-Class Examples, *TWE*, p. 380
- _____ ⇨ *Study Guide Masters*, p. 69
- _____ Reteaching the Lesson, *TWE*, p. 380
- _____ ⇨ *CD-ROM Program*, Resource Lesson 9-6, Interactive Lesson 9-6

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 380-381

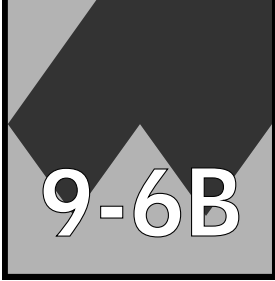
Homework Assignments (pp. 381-382)	
_____ Core: 9-17 odd, 20-23	_____ Enriched: 8-16 even, 17, 18, 20-23
_____ Optional: 19 (Working on the Chapter Project)	
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 582
- _____ ⇨ *Practice Masters*, p. 69
- _____ ⇨ *Science and Mathematics Lab Manual*, pp. 13-16
- _____ Math In The Media, *SE*, p. 382
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 77

4 ASSESS

- _____ Let the Games Begin, *SE*, p. 383
- _____ Closing Activity, Speaking, *TWE*, p. 382
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 240
- _____ Extending the Lesson, *TWE*, p. 382
- _____ ⇨ *Enrichment Masters*, p. 69

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Lesson Planning Guide (pp. 384-385)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Create Escher-like drawings by using translations.
- _____ State/local objectives: _____

NCTM Standards: 2, 3, 6-8, 10
South Carolina Math Curriculum Standards Grade 6: GEO I.B.1., GEO I.C.2.

MANAGEMENT

- _____ Getting Started, *TWE*, p. 384
- _____ ⇨ *Hands-On Lab Masters*, p. 12: centimeter grid
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 9-6B
- _____ ⇨ *Overhead Manipulative Resources*: centimeter grid

ASSESS

- _____ *TWE*, p. 385
- _____ ⇨ *Hands-On Lab Masters*, p. 60

Class Activity (pp. 384-385)
_____ All: 1-8
_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 385

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Review and Assessment (pp. 386-393)



Teacher's Name _____ Dates _____

Grade _____ Class _____

Review M Tu W Th F
Testing M Tu W Th



- _____ Study Guide and Assessment, *SE*, pp. 386-389
- _____ Standardized Test Practice, *SE*, pp. 390-391
- _____ Chapter Test, *SE*, p. 603

⇨ **Assessment and Evaluation Masters** (pp. 225-243)

Multiple-Choice Tests

Free-Response Tests

- | | |
|-----------------------------------------------|---------------------------------------|
| _____ Form 1A, 1B, or 1C, pp. 225-230 | _____ Form 2A, 2B, or 2C, pp. 231-236 |
| _____ Standardized Test Practice, pp. 241-242 | _____ Performance Assessment, p. 237 |
| | _____ Cumulative Review, p. 243 |

- _____ ⇨ *MindJogger Videoquizzes*, Chapter 9
- _____ ⇨ *Test and Review Software*
- _____ ⇨ *CD-ROM Assessment Game*
- _____ ⇨ *State Test Preparation CD-ROM*
- _____ ⇨  *South Carolina Parent and Student Study Guide Workbook*, p. 78
- _____ ⇨  *South Carolina PACT Workbook and Test Preparation, Grade 6*

Interdisciplinary Investigation, SE, pp. 392-393

- _____ ⇨ *Interdisciplinary Investigation, TWE*, pp. 392-393
- _____ ⇨ *Investigations and Projects Masters*, pp. 9-12

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