

13 Exploring Discrete Math and Probability



Chapter Pacing Guide

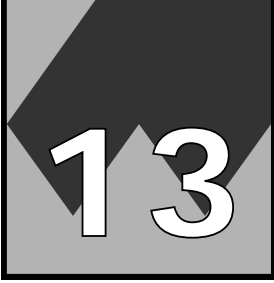
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

<i>Day (Honors)</i>	<i>Lesson</i>	<i>Title</i>
1	*Chapter Project	Theme: Games Advance to <i>GO</i> and Collect \$200
2	13-1A	<small>THINKING LAB</small> Problem Solving Act It Out
3	13-1	Theoretical and Experimental Probability
4	13-2	Tree Diagrams
5	13-3	The Counting Principle
6	13-4	Independent and Dependent Events
	*13-5A	<small>HANDS-ON LAB</small> Cooperative Learning Exploring Permutations
7	13-5	Permutations
8	*13-6A	<small>HANDS-ON LAB</small> Cooperative Learning Exploring Combinations
	13-6	Combinations
9	Review: Study Guide and Assessment	
10	Assessment: Chapter Test	

*Optional

Chapter Resources

<p>Meeting Individual Needs <i>Investigations for the Special Education Student</i>, The Game Show, pp. 45-46 <i>Spanish Study Guide and Assessment</i> <i>Study Guide and Practice Workbook</i></p>	<p>Technology <i>Electronic Teacher's Classroom</i> <i>Resources (ETCR)</i> www.glencoe.com/sec/math/mac/mathnet</p>
<p>Interactive Mathematics: Activities and Investigations Units 1 and 14</p>	<p>Applications <i>Family Letters and Activities</i>, pp. 51-52 <i>Spanish Family Letters and Activities</i>, pp. 51-52</p>



Chapter Project (pp. 526-527)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Analyze the use of probability in board games.
- _____ Design their own game, combining skill and chance.
- _____ State/local objectives: _____

Theme: Games

- _____ Chapter Project, *SE*, p. 527
- _____ Chapter 13 Notes, *TWE*, p. 526
- _____ Question of the Day, *TWE*, p. 526
- _____ ⇔ *Investigations and Projects Masters*, pp. 65-68

Homework Assignments

- _____ p. 533, Working on the Chapter Project, Exercise 22
- _____ p. 545, Working on the Chapter Project, Exercise 18
- _____ p. 557, Completing the Chapter Project, Alternative Assessment

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

13-1A

Lesson Planning Guide (pp. 528-529)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Solve problems by acting them out.
- _____ State/local objectives: _____

NCTM Standards:

1, 6-9

1 FOCUS

- _____ Getting Started, *TWE*, p. 528

2 TEACH

- _____ In-Class Examples, *TWE*, p. 528
- _____ Reteaching the Lesson, *TWE*, p. 528

3 PRACTICE/APPLY

- _____ Check for Understanding, *TWE*, p. 529

Homework Assignments (p. 529)

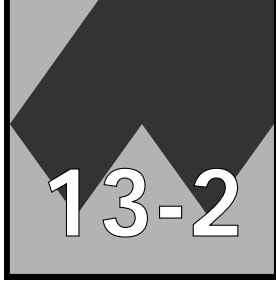
- _____ All: 5-14
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 602
- _____ Mixed Problem Solving, *SE*, pp. 605-606

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 529
- _____ Extending the Lesson, *TWE*, p. 529

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Lesson Planning Guide (pp. 534-537)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Use tree diagrams to count outcomes.
- _____ State/local objectives: _____

NCTM Standards: 5-10
South Carolina Math Curriculum Standards
Grade 7: DAP IV.C.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 534
- _____ ⇨ Transparency 13-2A
- _____ Motivating the Lesson, Communication, *TWE*, p. 534
- _____ Multiple Learning Styles, Logical, *TWE*, p. 534

2 TEACH

- _____ ⇨ Transparency 13-2B
- _____ In-Class Examples, *TWE*, p. 535
- _____ Using the Mini-Lab, *TWE*, p. 535
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-2
- _____ ⇨ *Study Guide Masters*, p. 94
- _____ Reteaching the Lesson, *TWE*, p. 535
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-2

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 535

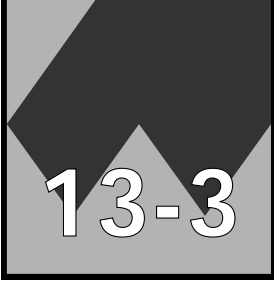
Homework Assignments (p. 536)	
_____ Core: 7-13 odd, 15-18	_____ Enriched: 8-12 even, 13-18
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 603
- _____ ⇨ *Practice Masters*, p. 94
- _____ ⇨ *School to Career Masters*, p. 26
- _____ School to Career Activity, *SE*, p. 537
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 106

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 536
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 351
- _____ Extending the Lesson, *TWE*, p. 536
- _____ ⇨ *Enrichment Masters*, p. 94

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Lesson Planning Guide (pp. 538-541)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Use multiplication to count outcomes.
- _____ State/local objectives: _____

NCTM Standards: 1, 2, 5-10
South Carolina Math Curriculum Standards
Grade 7: DAP IV.C.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 538
- _____ ⇨ Transparency 13-3A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 538
- _____ Multiple Learning Styles, Visual/Spatial, *TWE*, p. 538

2 TEACH

- _____ ⇨ Transparency 13-3B
- _____ Thinking Algebraically, *TWE*, p. 539
- _____ In-Class Examples, *TWE*, p. 539
- _____ ⇨ *Study Guide Masters*, p. 95
- _____ Reteaching the Lesson, *TWE*, p. 540
- _____ Error Analysis, *TWE*, p. 540
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-3

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 540

Homework Assignments (pp. 540-541)

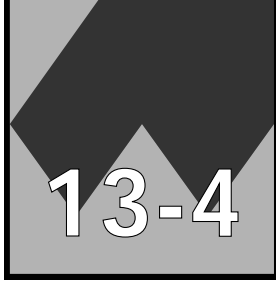
- | | |
|-----------------------------------|----------------------------------|
| _____ Core: 7-13 odd, 15-17 | _____ Enriched: 8-12 even, 13-17 |
| _____ Alternate Assignment: _____ | |

- _____ Extra Practice, *SE*, p. 603
- _____ ⇨ *Practice Masters*, p. 95
- _____ ⇨ *Hands-On Lab Masters*, p. 84
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 107

4 ASSESS

- _____ Let the Games Begin, *SE*, p. 541
- _____ Closing Activity, Modeling, *TWE*, p. 541
- _____ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 350
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 351
- _____ Extending the Lesson, *TWE*, p. 541
- _____ ⇨ *Enrichment Masters*, p. 95

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Lesson Planning Guide (pp. 542-545)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find the probability of independent and dependent events.

_____ State/local objectives: _____

NCTM Standards: 1, 5-10
South Carolina Math Curriculum Standards
Grade 7: DAP IV.A.1., DAP IV.C.1., DAP IV.C.2.

1 FOCUS

_____ 5-Minute Check, *TWE*, p. 542

_____ ⇨ Transparency 13-4A

_____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 542

_____ Multiple Learning Styles, Kinesthetic, *TWE*, p. 542

2 TEACH

_____ ⇨ Transparency 13-4B

_____ Using the Mini-Lab, *TWE*, p. 543

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-4

_____ In-Class Examples, *TWE*, p. 543

_____ ⇨ *Study Guide Masters*, p. 96

_____ Reteaching the Lesson, *TWE*, p. 544

_____ ⇨ *CD-ROM Program*, Resource Lesson 13-4

3 PRACTICE/APPLY

_____ Check for Understanding, *SE*, p. 544

Homework Assignments (pp. 544-545)

_____ Core: 9-17 odd, 19, 20

_____ Enriched: 8-14 even, 15-17, 19, 20

_____ Optional: 18 (Working on the Chapter Project)

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 604

_____ ⇨ *Practice Masters*, p. 96

_____ ⇨ *Technology Masters*, Calculator Activity, p. 51

_____ ⇨ *Diversity Masters*, p. 26

_____ ⇨ *Science and Mathematics Lab Manual*, pp. 93-96

_____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 108

4 ASSESS

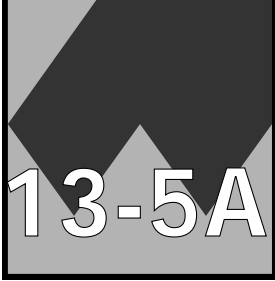
_____ Closing Activity, Writing, *TWE*, p. 545

_____ ⇨ *Enrichment Masters*, p. 96

_____ Extending the Lesson, *TWE*, p. 545

_____ Mid-Chapter Self Test, *SE*, p. 545

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Lesson Planning Guide (p. 546)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Explore permutations.
- _____ State/local objectives: _____

NCTM Standards: 1, 5-10
South Carolina Math Curriculum Standards Grade 7: DAP IV.C.1.

MANAGEMENT

- _____ Getting Started, *TWE*, p. 546
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 13-5A

ASSESS

- _____ *TWE*, p. 546
- _____ ⇨ *Hands-On Lab Masters*, p. 70

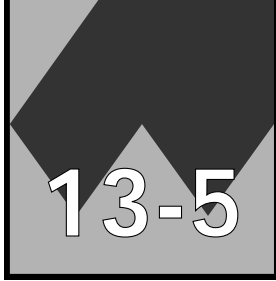
Class Activity (p. 546)

_____ All: 1-6

_____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 546

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Lesson Planning Guide (pp. 547-549)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find the number of permutations of a set of objects.
- _____ State/local objectives: _____

NCTM Standards: 1, 5-9
South Carolina Math Curriculum Standards Grade 7: DAP IV.C.1.

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 547
- _____ ⇨ Transparency 13-5A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 547

2 TEACH

- _____ ⇨ Transparency 13-5B
- _____ Reading Mathematics, *TWE*, p. 547
- _____ In-Class Examples, *TWE*, p. 548
- _____ ⇨ *Study Guide Masters*, p. 97
- _____ Reteaching the Lesson, *TWE*, p. 548
- _____ Multiple Learning Styles, Auditory/Musical, *TWE*, p. 548
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-5

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 548

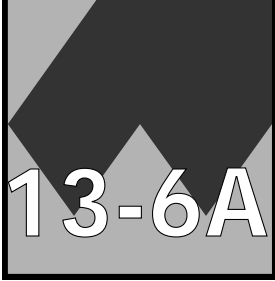
Homework Assignments (p. 549)	
_____ Core: 9-19 odd, 21-24	_____ Enriched: 10-18 even, 19-24
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 604
- _____ ⇨ *Practice Masters*, p. 97
- _____ ⇨ *Technology Masters*, Graphing Calculator Activity, p. 52
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 109

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 549
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 352
- _____ Extending the Lesson, *TWE*, p. 549
- _____ ⇨ *Enrichment Masters*, p. 97

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Lesson Planning Guide (p. 550)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Explore combinations.
- _____ State/local objectives: _____

NCTM Standards: 1, 5-9
South Carolina Math Curriculum Standards Grade 7: DAP IV.C.1.

MANAGEMENT

- _____ Getting Started, *TWE*, p. 550
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 13-6A

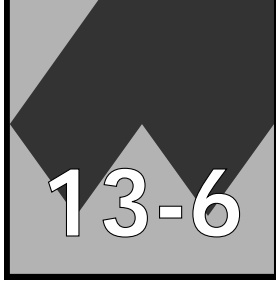
ASSESS

- _____ *TWE*, p. 550
- _____ ⇨ *Hands-On Lab Masters*, p. 71

Class Activity (p. 550)
_____ All: 1-5 _____ Alternate Assignment: _____

- _____ Math Journal, *TWE*, p. 550

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Lesson Planning Guide (pp. 551-553)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Find the number of combinations of a set of objects.
- _____ State/local objectives: _____

NCTM Standards: 1, 5-10
South Carolina Math Curriculum Standards Grade 7: GEO IV.C.1., DAP IV.C.1

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 551
- _____ ⇨ Transparency 13-6A
- _____ Motivating the Lesson, Communication, *TWE*, p. 551
- _____ Multiple Learning Styles, Interpersonal, *TWE*, p. 551

2 TEACH

- _____ ⇨ Transparency 13-6B
- _____ Reading Mathematics, *TWE*, p. 551
- _____ In-Class Examples, *TWE*, p. 552
- _____ ⇨ *Study Guide Masters*, p. 98
- _____ Reteaching the Lesson, *TWE*, p. 552
- _____ Error Analysis, *TWE*, p. 552
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-6

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 552

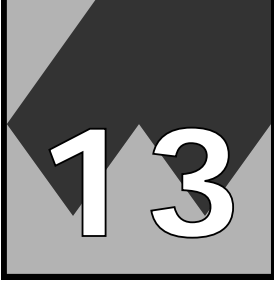
Homework Assignments (p. 553)	
_____ Core: 7-15 odd, 16-18	_____ Enriched: 8-12 even, 13-18
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 604
- _____ ⇨ *Practice Masters*, p. 98
- _____ ⇨ *Classroom Games*, pp. 35-40
- _____ Family Activity, *SE*, p. 553
- _____ ⇨ *South Carolina Parent and Student Study Guide Workbook*, p. 110

4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 553
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 352
- _____ Extending the Lesson, *TWE*, p. 553
- _____ ⇨ *Enrichment Masters*, p. 98

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Review and Assessment (pp. 554-559)



Teacher's Name _____ Dates _____

Grade _____ Class _____

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



- _____ Study Guide and Assessment, *SE*, pp. 554-557
- _____ Standardized Test Practice, *SE*, pp. 558-559
- _____ Chapter Test, *SE*, p. 619

⇔ **Assessment and Evaluation Masters (pp. 337-355)**

Multiple-Choice Tests

Free-Response Tests

- | | |
|---|---------------------------------------|
| _____ Form 1A, 1B, or 1C, pp. 337-342 | _____ Form 2A, 2B, or 2C, pp. 343-348 |
| _____ Standardized Test Practice, pp. 353-354 | _____ Performance Assessment, p. 349 |
| | _____ Cumulative Review, p. 355 |

- _____ ⇔ *MindJogger Videoquizzes*, Chapter 13
- _____ ⇔ *Test and Review Software*
- _____ ⇔ *CD-ROM Assessment Game*
- _____ ⇔ *State Test Preparation CD-ROM*
- _____ ⇔  *South Carolina Parent and Student Study Guide Workbook*, p. 111
- _____ ⇔  *South Carolina PACT Workbook and Test Preparation, Grade 7*

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