

13 Exploring Discrete Math and Probability



Chapter Pacing Guide

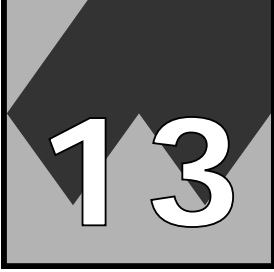
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

| <i>Day (Honors)</i> | <i>Lesson</i> | <i>Title</i> |
|-------------------------|------------------------------------|--|
| 1 | *Chapter Project | Theme: Games Advance to GO 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.

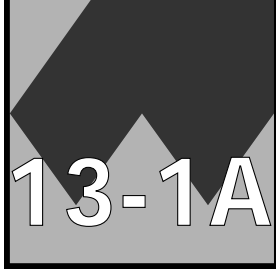
Theme: Games

- _____ 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



Lesson Planning Guide (pp. 528-529)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve problems by acting them out.

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

**The California Mathematics
Academic Content Standards**

**Grade 6:
Optional Lesson**

**Grade 7: MR2.5, MR2.6,
MR3.2, MR3.3**

Basic Lesson

Homework Assignments (p. 529)

_____ All: 5-14

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 602

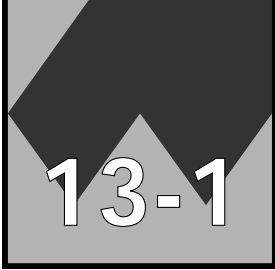
_____ Mixed Problem Solving, *SE*, pp. 605-606

4 ASSESS

_____ Closing Activity, Writing, *TWE*, p. 529

_____ Extending the Lesson, *TWE*, p. 529

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



Lesson Planning Guide (pp. 530-533)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Find and compare experimental and theoretical probabilities.

The California Mathematics Academic Content Standards

Grade 6: SDP3.1, SDP3.3

Key Lesson

Grade 7: MR2.5, MR2.6

Basic Lesson

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 530
- _____ ⇨ Transparency 13-1A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 530
- _____ Let the Games Begin, *SE*, p. 530
- _____ Cross-Curriculum Cue, *TWE*, p. 530

2 TEACH

- _____ ⇨ Transparency 13-1B
- _____ In-Class Examples, *TWE*, p. 531
- _____ Using the Mini-Lab, *TWE*, p. 531
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-1
- _____ ⇨ *Study Guide Masters*, p. 93
- _____ Reteaching the Lesson, *TWE*, p. 532
- _____ Error Analysis, *TWE*, p. 532
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-1, Interactive Lesson 13-1

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 532

Homework Assignments (pp. 532-533)

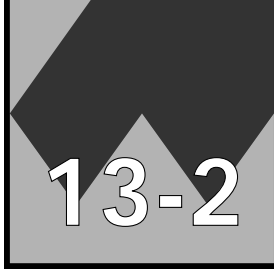
- _____ Core: 9-21 odd, 23-26 _____ Enriched: 10-18 even, 19-21, 23-26
- _____ Optional: 22 (Working on the Chapter Project)
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 603
- _____ ⇨ *Practice Masters*, p. 93

4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 533
- _____ Extending the Lesson, *TWE*, p. 533
- _____ ⇨ *Enrichment Masters*, p. 93

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



Lesson Planning Guide (pp. 534-537)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Use tree diagrams to count outcomes.

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|--|
| The California Mathematics Academic Content Standards |
| Grade 6: SDP3.1 Key Lesson |
| Grade 7: MR2.5, MR2.6 Basic Lesson |

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)

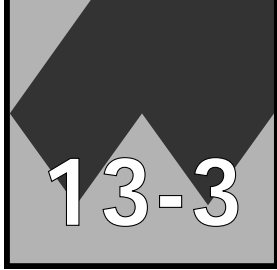
- _____ Core: 7-13 odd, 15-18
- _____ Enriched: 8-12 even, 13-18
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 603
- _____ ⇨ *Practice Masters*, p. 94
- _____ ⇨ *School to Career Masters*, p. 26
- _____ School to Career Activity, *SE*, p. 537

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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|------------|-----------------------------|---|------------------------------|
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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.

The California Mathematics
Academic Content Standards

Grade 6:
Prerequisite Lesson

Grade 7: MR2.5, MR2.6
Basic Lesson

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)

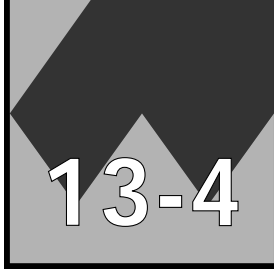
- _____ Core: 7-13 odd, 15-17
- _____ Enriched: 8-12 even, 13-17
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 603
- _____ ⇨ *Practice Masters*, p. 95
- _____ ⇨ *Hands-On Lab Masters*, p. 84

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.

The California Mathematics Academic Content Standards

Grade 6: SDP3.2, SDP3.4, SDP3.5

Key Lesson

Grade 7: MR2.5, MR2.6
Basic Lesson

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)

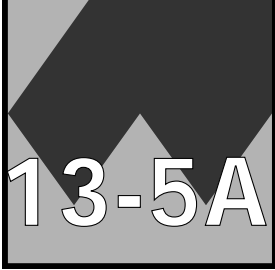
- _____ Core: 9-17 odd, 19, 20 _____ Enriched: 8-14 even, 15-17, 19, 20
- _____ Optional: 18 (Working on the Chapter Project)
- _____ Alternate Assignment: _____

- _____ 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

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.

MANAGEMENT

_____ Getting Started, *TWE*, p. 546

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*,
Lesson 13-5A

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| The California Mathematics Academic Content Standards |
| Grade 6: Optional Lesson |
| Grade 7: MR2.5, MR2.6 Basic Lesson |

ASSESS

_____ *TWE*, p. 546

_____ ⇨ *Hands-On Lab Masters*, p. 70

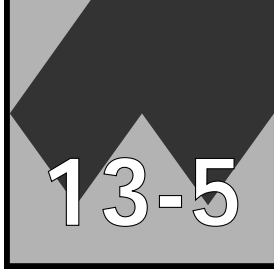
Class Activity (p. 546)

_____ 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.

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

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| The California Mathematics Academic Content Standards |
| Grade 6: Prerequisite Lesson |
| Grade 7: MR2.5, MR2.6 Basic Lesson |

Homework Assignments (p. 549)

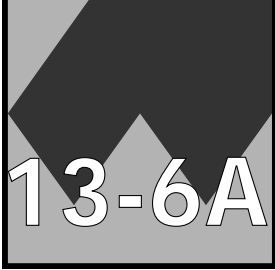
- _____ Core: 9-19 odd, 21-24 _____ Enriched: 10-18 even, 19-24
 _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 604
- _____ ⇨ *Practice Masters*, p. 97
- _____ ⇨ *Technology Masters*, Graphing Calculator Activity, p. 52

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.

MANAGEMENT

_____ Getting Started, *TWE*, p. 550

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*,
Lesson 13-6A

| |
|--|
| The California Mathematics Academic Content Standards |
| Grade 6: Optional Lesson |
| Grade 7: MR2.5, MR2.6 Basic Lesson |

ASSESS

_____ *TWE*, p. 550

_____ ⇨ *Hands-On Lab Masters*, p. 71

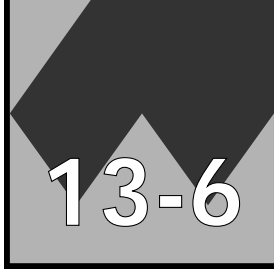
Class Activity (p. 550)

_____ 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.

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| The California Mathematics Academic Content Standards |
| Grade 6: Prerequisite Lesson |
| Grade 7: MR2.5, MR2.6 Basic Lesson |

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

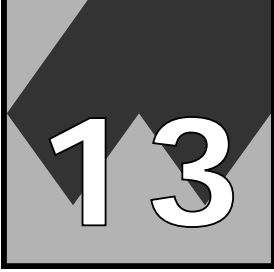
| | |
|--------------------------------------|----------------------------------|
| Homework Assignments (p. 553) | |
| _____ Core: 7-15 odd, 16-18 | _____ Enriched: 8-12 even, 13-18 |
| _____ Alternate Assignment: _____ | |

- _____ Extra Practice, *SE*, p. 604
- _____ ⇨ *Practice Masters*, p. 98
- _____ ⇨ *Classroom Games*, pp. 35-40
- _____ Family Activity, *SE*, p. 553

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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|------------|-----------------------------|---|------------------------------|
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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*
- _____ ⇔  *California Framework Practice and Sample Test Workbook*, Grade 6
- _____ ⇔  *California Framework Practice Transparencies*, Grade 6
- _____ ⇔  *California Framework Practice and Sample Test Workbook*, Grade 7
- _____ ⇔  *California Framework Practice Transparencies*, Grade 7

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