

TABLE OF CONTENTS

ABOUT THIS BOOK	vii
INTRODUCTION	1
CHAPTER 1	
The Concept of Probability	11
Who Will Win?	17
Two Dice	20
More Often and Most Often	23
Empirical Probabilities	26
CHAPTER 2	
Probability Distributions	29
Fair Spinners	38
Dice Differences	41
Test Guessing	43
Number Golf	45
First Head	47
Strings of Heads	49
CHAPTER 3	
Prediction and the Law of Large Numbers	51
Racing Game	56
Two Hospitals	61
Gumball Machine	64
How Will It Land?	67
The Long Flight Home	69
CHAPTER 4	
Connecting Probability and Statistics	73
Dixie's Basketball Contest	78
Newspaper Route	80
How Black Is a Zebra?	84
LOOKING BACK AND LOOKING AHEAD	87
APPENDIX	
Blackline Masters and Solutions	89
Who Will Win?	90
Two Dice	91
Pets	93
More Often and Most Often	94
Ratios	95
Fair Spinners	99
Dice Differences	102
Test Guessing	104
Number Golf: One Die	105

Number Golf: Two Dice	106
First Head	107
Strings of Heads	109
Racing Game	113
Pooled Racing-Game Data	115
Two Hospitals	116
Gumball Machine	119
How Will It Land?	121
The Long Flight Home	123
The Long Flight Home—Extension	124
Dixie's Basketball Contest	125
Newspaper Route	127
How Black Is a Zebra?	128
Solutions for the Blackline Masters	130

REFERENCES	139
------------------	-----