? ? ? Table of Contents
How to Use This Book ..... 3
NCTM Standards ..... 4
Unit 1
How to Apply Problem-Solving Strategies ..... 5
Practice Reading and Understanding Problems ..... 6
Practice Applying a Problem-Solving Plan ..... 7
Practice Checking for Reasonable Answers ..... 8
Unit 2
How to Solve Numerical Word Problems ..... 9
Practice Determining the Operation to Solve Word Problems ..... 10
Practice Applying Numeration Skills to Solve Word Problems ..... 11
Practice Using Patterns to Solve
Numerical Word Problems. ..... 12
Unit 3
How to Estimate to Solve Word Problems ..... 13
Practice Applying Estimation Skills to Solve Word Problems ..... 14
Practice Estimating Money Word Problems ..... 15
Practice Estimating Word Problems with Decimals ..... 16
Unit 4
How to Solve Word Problems Involving Measurement. ..... 17
Practice Solving Word Problems
Involving Linear Measurements ..... 18
Practice Solving Word Problems
Involving Volume and Capacity ..... 19
Practice Solving Word Problems Involving Weight and Mass ..... 20
Unit 5
How to Solve Word Problems Involving Time ..... 21
Practice Solving Word Problems
Involving Elapsed Time. ..... 22
Practice Solving Word Problems That Compare and Measure Time ..... 23
Practice Solving Word Problems ThatRequire Time Conversions24

## Unit 6

How to Solve Word Problems Involving Fractions ..... 25
Practice Solving Word Problems Involving Fractional Parts ..... 26
Practice Solving Word Problems That Compare and Measure Fractional Parts ..... 27
Practice Solving Word Problems Involving Fractional Measurements ..... 28
Unit 7
How to Solve Word Problems Involving Geometry ..... 29
Practice Solving Word Problems Involving Geometric Shapes ..... 30
Practice Solving Word Problems Involving Geometric Computations ..... 31
Practice Solving Directional Word Problems ..... 32
Unit 8
How to Solve Multi-Step Word Problems ..... 34
Practice Solving Multi-Step Word Problems ..... 35
Practice Solving Multi-Step Word Problems Involving Money ..... 36
Practice Solving Multi-Step Word Problems Involving Measurement ..... 37
Unit 9
How to Solve Algebraic Word Problems ..... 38
Practice Solving Word Problems Involving Exponents ..... 39
Practice Solving Word Problems Involving Algebraic Equations. ..... 40
Practice Solving Algebraic Word Problems with Patterns ..... 41
Unit 10 (Real Life)
Word Problems in the Produce Aisle ..... 42
Unit 11 (Brain Teasers)
Where in the World is Irvin? ..... 43
Unit 12 (Technology)
Internet Movie Link ..... 45
Hyperlink Word Problems ..... 46
Answer Key ..... 47
\#2950 How to Solve Word Problems: Grades 5-62

## 3 Practice <br> Estimating Money Word Problems

Directions: Use what you learned on page 13 about rounding and front-end estimation to solve the following word problems that deal with money.

Jean's parents have given her $\$ 100.00$ with which to decorate her room. She excitedly combs through magazines and catalogs to find the best prices on the items she wishes to


Without using paper, pencil, or a calculator, does Jean have enough to buy . . .

1. the paint, border, blanket, bedspread, and pillows?
2. the ceiling fan, wall hanging, lamp, and chair? $\qquad$
3. the stuffed bear, bedspread, and paint? $\qquad$
List three possible combinations of items Jean may select with which to spend her \$100.00.
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. Roger likes to buy a milkshake at lunch three days each week. Milkshakes cost $\$ 1.25$ each. About how much money does Roger spend each month? (Hint: There are about four weeks in each month.) $\qquad$
8. Farley dumps his piggy bank. He estimates that he has between 10 to 14 quarters, 25 to 29 dimes, 14 to 18 nickels, and 40 to 60 pennies. About how much money does Farley have? $\qquad$

## 9 Practice <br> Solving Algebraic Word Problems with Patterns

Directions: Use what you learned on page 38 to continue the T-chart patterns. Then solve for the unknown quantity.

> Beatrice builds cubes with large marshmallows $(\mathrm{m})$ and straws ( s ).
> For each cube she needs 8 marshmallows and 12 straws. The chart shows her progress as she continues to build cubes. Fill in the chart for the next three builds.


1. How much do the $m$ values increase with each cube? $\qquad$
2. How much do the $s$ values increase with each cube? $\qquad$

| $c$ | $c$ |
| :---: | :---: |
| 8 | 12 |
| 16 | 24 |

3. How many marshmallows does Beatrice use with the unknown $s$ quantity?
$\qquad$
4. Use the algebraic equation to solve for $s$. $\qquad$

$$
s=3 \times 1 / 2 m
$$

Rafael builds a geometric dome using clay (c) and toothpicks ( $t$ ). He starts with 4 clay balls and 6 toothpicks. He adds 2 clay balls and 3 toothpicks each time as he makes it bigger. The chart shows his progress and the pattern. Continue the pattern for the next
 three additions.
5. How much do the $c$ values increase each time? $\qquad$
6. How much do the $t$ values increase each time? $\qquad$
7. How many clay balls does Rafael use with the unknown $t_{1}$ quantity?
$\qquad$
8. How many clay balls does Rafael use with the unknown $t_{2}$ quantity?

| $c$ | $t$ |
| :---: | :---: |
| 4 | 6 |
| 6 | 9 |
| 8 | 12 |
| 10 | 15 |
| - | - |
| - | - |
| 20 | $t_{1}$ |
| 50 | $t_{2}$ |

10. Use your equation to solve for $t_{1}$. $\qquad$
11. Use your equation to solve for $t_{2}$. $\qquad$
