

NAME _____

Module 2 Whole Number Operations
Lesson 5 Problem-solving Strategies

Lesson Objective

- Develop and apply a variety of strategies to solve problems with emphasis on multi-step and non-routine problems.

Subtopics 1 and 2 Problem-solving Basics and Draw a Diagram

Problem-solving Basics

What is problem solving?

- _____ is engaging in a task for which the solution method is not obvious or not known immediately.

Problem-solving Steps

- _____ the problem.
- Devise a _____.
- _____ the plan.
- CHECK the _____.

Problem-solving Strategies

- *Guess and* _____
- *Make a Drawing or* _____
- *Look for a* _____
- *Make a Table or a* _____

- 1** Five people are in a room. Each person shakes hands with every other person. How many handshakes are there?

- 2 In a Learning Languages Seminar, 25 students are studying Plutonese, 20 students are studying Neptunese, and eight are studying both Plutonese and Neptunese. How many students are in the seminar?



Subtopic 3 Look for a Pattern and Make a List

- 3 A palindromic number is a number that is the same whether read from right to left or left to right, such as 121. How many three-digit palindromic numbers can be made using the digits 1, 2, and 3?

Subtopic 4 Guess and Check

- 4 Use each of the digits from zero to nine exactly once in the subtraction problem. The minuend and subtrahend have five digits each. The minuend contains only even digits. The subtrahend contains only odd digits. Find the missing digits.

Additional Work Area