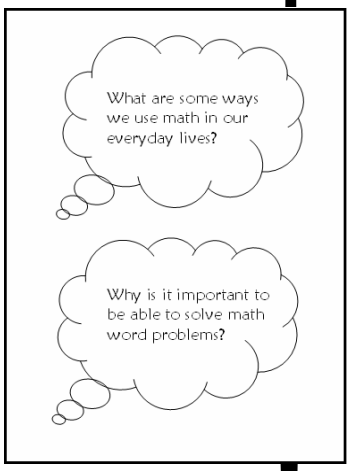
Steps and Strategies Intro

Teaching Strategies

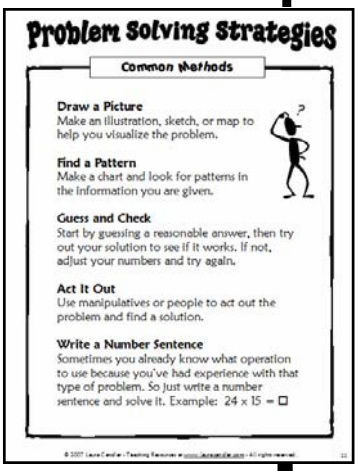
If your students aren't experienced problem-solvers, you'll find it helpful to begin by focusing on a different problem-solving strategy each day. There are probably a dozen strategies you could teach, but to keep things simple we'll focus on just 5 different methods. Each one has a blackline master with a few problems that can be solved using that strategy. Make a transparency of each blackline master and let your students work the problems on individual dry erase boards or scrap paper.

Day 1 - Introduction



Display or ask the first question shown on the blackline master: "What are some ways that we use math in our everyday lives?" Ask students to think about their own responses, and then give them 3 minutes to work with a partner and list their ideas. Then ask volunteers to share their ideas and create a class list on chart paper. Examples include time, money, measurement, etc.

Next discuss the related question, "Why is it important to be able to solve math word problems?" Students usually mention reasons like being on time, being able to figure out how much change you'll receive, knowing how much food to buy for a party, and so on.


Problem Solving Strategies

Common Methods

Draw a Picture
Make an illustration, sketch, or map to help you visualize the problem.

Find a Pattern
Make a chart and look for patterns in the information you are given.

Guess and Check
Start by guessing a reasonable answer, then try out your solution to see if it works. If not, adjust your numbers and try again.

Act It Out
Use manipulatives or people to act out the problem and find a solution.

Write a Number Sentence
Sometimes you already know what operation to use because you've had experience with that type of problem. So just write a number sentence and solve it. Example: 24 x 15 = □

Then explain that even though many students find word problems to be tricky, they can be fun if you think of them as puzzles or brainteasers. Tell them that you are going to share 5 different methods commonly used to tackle word problems. Display a transparency or chart showing the Problem Solving Strategies and briefly mention each method. (Hint: You might want to duplicate this page for your students or create a poster of the strategies since it's difficult to show them on the overhead when you are using the projector to work out math problems!)