

Mathematical Problem Solving

- *Cognitive Strategy Training* is a process that incorporates a variety of problem solving techniques including drawing a diagram, restating the problem in one's own words, working backwards, exploring analogous problems and identifying extraneous information. The use of modeling strategies has been recommended.
- *Steps in Verbal Mathematical Problem Solving:*
 1. Read the problem aloud.
 2. Paraphrase
 - a. Give important information
 - b. Repeat the question aloud.
 - c. What is asked? What am I looking for?
 3. Visualize
 - a. Draw a diagram.
 4. State the problem
 - a. I have ...I want to find...
 5. Hypothesize
 - a. If I ... then...
 - b. How many steps?
 6. Estimate
 - a. Round the numbers.
 7. Calculate
 - a. Label.
 - b. Circle.
 8. Self-check
 - a. Check every step.
 - b. Check calculation.
 - c. Does the answer make sense?

Please see attached math checklist.

Math Problem Solving Checklist

- Read the problem aloud.
- What is the important information? What am I looking for?
- Draw a diagram to help better understand the problem.
- Time to think ...
 - What are the steps to solve this problem?
 - If I ... then ...
- Calculate and label your answer.
- Check your answer.
 - Check your calculation.
 - Does your answer make sense?