

## **Problem-Solving Strategy – Guess and Check**

Yew, W. T.; Lian, L. H.; and Meng, C. C. (2017). Problem solving strategies among primary School teachers. *Journal of Education and Practice* 8(15), 136-140.

Guerrero, S. M. (2010). The value of guess and check. *Mathematics Teaching in the Middle School* 15(7), 392-398.

**This targeted intervention is a problem-solving strategy that students can use to solve word problems by guessing the answer and then checking that the guess fits the conditions of the problem.**

### **Materials:**

- Word problems
- Paper/Pencil
- Chart with **Guess and Check Steps:**
  - (1) Think of an answer that might work for your problem, and then test your guess.
  - (2) If your guess isn't right, think about how you can change it to get closer to your answer.
  - (3) Write down your guesses and look for patterns that will help you get closer to your answer.
  - (4) Repeat these steps until you reach the exact answer.

### **Steps:**

1. The teacher and student(s) read the problem together. The teacher paraphrases the problem.
2. The student(s) determine what the problem is asking.
3. The student(s) guess a number to put into the problem.
4. The student(s) solve the problem and checks to see if the answer is correct.
5. If the answer is too big or small, the student(s) make another guess.
6. The student(s) look for patterns to help find the answer.
7. The student(s) continue the process of guessing and checking until the solution is correct.