Formative Feedback for Problem Solving

Problem Solving Strategy

First. Understand the problem. Read and reread the problem. Highlight the key words.

✓ What does the problem ask you to find? (This is the unknown.)
✓ What data does the problem give you?
✓ What are the requirements or conditions?
⇒ Hint: Draw a figure or picture. Make a table or model.
⇒ Hint: Introduce helpful symbols.

Second. Make a plan. Have you solved other problems like this one before?

✓ What steps will you take to get from the data to the unknown?
✓ Does your plan use all of the important data?
⇒ Stuck? Tactic: Is there a similar problem which is simpler?
⇒ Stuck? Tactic: Could you solve part of the problem?
⇒ Stuck? Tactic: Could you restate the problem?
⇒ Stuck? Tactic: Would other data help you find the unknown?

Third. Carry out your plan.

✓ Check each step.
✓ Can you see clearly that the step is correct?

Fourth. Look back. Reread the problem.

✓ Did you answer the question that was asked?
✓ Was more than one question asked?
✓ Is your answer reasonable?
✓ Can you check the result? Can you think of an easier way to solve the problem?