## LCISD PROBLEM SOLVING

## **3 READS PROTOCOL**

The 3 Reads Protocol helps students visualize problems, contextualize the numbers, and distinguish between necessary and extra information.

1. <u>Read for context:</u> What is the story about?

Draw a model that could represent the story and label the parts of the model.

2. <u>Read</u> to understand the quantities and their relationships: What are the numbers in the story? What do they mean? How are they related?

Carefully place the numbers from the story into the model.

3. <u>Read</u> to determine what mathematical questions we could answer: What mathematical questions could we answer using the information in this problem?

Brainstorm questions that could be asked.

4. <u>Solve</u>: Does your model represent the story? What strategies can you use to solve?

Provide the question for the problem. Verify that the model created accurately depicts the story. Solve and justify your answer.

5. **<u>Check:</u>** Is your solution reasonable?

Evaluate your answer.

## **PS STRATEGIES**

- 1. Draw a Picture
- 2. Make a Model
- 3. Make a List
- 4. Make a Chart or Table
- 5. Look for a Pattern
- 6. Act it Out
- 7. Work Backwards
- 8. Guess and Check
- 9. Use Logical Reasoning
- 10. Find a Pattern or Rule
- 11. Write a Number Sentence
- 12. Write an Equation
- 13. Use Objects
- 14. Simplify the Problem
- 15. Estimate

