

Lesson Link #2
Problem Solving

Mathematical Reasoning Standards being taught:

- 1.0 - Students make decisions about how to approach problems.
- 1.1 – Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.
- 2.0 – Students use strategies, skills, and concepts in finding solutions.
- 2.4 – Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.

Problem Solving Strategies to be taught after the initial part of the lesson:
Draw a picture and/or Distinguishing relevant and irrelevant information.

Objective: Students choose an appropriate problem strategy and support their thinking using that strategy.

Procedures:

- (1) Restate problem solving strategies the class has previously used.
- (2) Distribute worksheet with candy bar word problem. Read new problem aloud while students follow along.
- (3) Give think time to students before they begin on their solutions. Students should solve the problem in the box with words, pictures, or both. Really emphasize the importance of how to use the box to show their work and the lines to write about what they did.
- (4) Encourage students to write about justifying the steps they have decided to follow on the lines below the solution box. Add to this step example sentences: (1) I chose this idea because.... (2) I decided to use this strategy because... (3) I know my answer is correct since I....
- (5) Share strategies with a partner or in a small group.
- (6) Debrief with whole class and review new strategies (draw a picture/relevant vs. irrelevant) students used to find their solution. When reviewing the strategy, have students underline the important/relevant

information and cross out the irrelevant information. Discuss what was found and why certain information is needed versus not being needed.

This lesson offers extensions:

- (1) The numbers have been modified on the bottom of the worksheet to give students the option to work with a problem that is more difficult.

Modifications:

- (1) Allow students to use fractions pieces to help them solve the problem.

