Math Lesson

Lesson Title:
Peas and Carrots

Content Standard:
1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Grade Level: One

Materials:
Bags of 7 each of orange and green counters, tiles, connecting cubes, etc., blank paper, five step curricular process paper, projector, chart paper

Shared Experience and procedure details:
Teacher relates a story about eating peas and carrots for dinner the night before. S/he had a magic spoon, and every time s/he scooped out some peas and carrots, there were always 7 items in the spoon. Questions: What could I have scooped up? What else? How many different combinations of 7 do you think I could choose? Students work in pairs with manipulatives and blank paper to create combinations. Teacher asks questions to make sure their pictures show the combinations clearly, i.e., "How do I know which is peas and which is carrots? Can you make more combinations?" Gather together to share solutions. Teacher charts answers; students share their pictures. Elicit multiple combinations; possible list them in order; discuss the differences or similiarities of 3 peas and 4 carrots vs. 4 peas and 3 carrots. Ask students to draw and write about the experience and share their pictures and people talk. Have a discussion about the features: What are all the 'things', 'ingredients', etc. that we need to share this activity with others? Discuss symbols. Symbolic representation may have been used in some drawings; share those examples, and encourage the class to use symbols to show the combinations for 7.

Prediction of Possible Pictures:
Literal pictures of peas and carrots in the correct colors, dots to represent peas and carrots, numbers, tally marks.

Prediction of Possible People Talk: Numbers, adds up, counted, drawings, all together, add, combinations, equal, total
Feature Talk: Add, total, plus, equals, equation, sum,(addend), combinations
Prediction of Possible Symbolic Representation: Numbers, plus sign, equal sign   Written by: Colvin, Porter, Paetsch, Stake, revised from Investigations, Grade One

Extensions and revisions

For the second lesson, the teacher used the total of 5. The reduction of the total possible combinations resulted in a more complete list of equations.

This lesson was brought to a second grade class using 'strawberries and blueberries', and the sum of 15.