## Lesson Plan

201 Name: \_\_\_\_\_

Course: Focus Math Grade: 8

Unit: Problem Solving

**Big Idea:** Learning to solve problems in mathematics involves collecting information from the problem, following a problem solving plan, and identifying and using problem solving strategies.

Subconcept: Mathematical problems contain important clues that can help in solving them.

Literacy Strategy(s): List-Group-Label

**Lesson:** Vocabulary Clues for Basic Operations 
Date Taught: November 24, 2008

## **Learning Objective(s):**

• Students will be able to list vocabulary words that describe using one of the four basic operations (addition, subtraction, multiplication, and division).

 Students will be able to sort the generated vocabulary words into four categories and correctly label each category.

## Idaho Standards (or National Standards if no Idaho Standards exist):

**8.M.1.1.6** – Recognize pertinent information for problem solving.

**8.M.1.1.8** – Use appropriate vocabulary.

### **Detailed Description of Lesson:**

- 1. In small groups, students need to generate a list of as many words as they can that describe using any of the four basic operations,
- 2. As a class, list the words on the board.
- 3. Have students quickly skim through math textbook to see if there are any they may have missed and add them to the list.
- 4. Group all words on the board into four categories: addition, subtraction, multiplication, and division, and label the categories.
- 5. Once categories have been completed, make a foldable booklet (pgs. 22-23, *Big Book of Math for Middle School and High School*).

### Handouts:

There are no handouts for this lesson.

## **Student Work:**

I only had six of the 8 students in class the day of this lesson, so I included a copy from each of them (either the word list or the booklet). On the word list, the starred words are ones the students came up with individually before we joined back together as a group.

# **LIMSST Project Literacy Lesson Reflection Form**

Name:	Date lesson was taught:	November 24, 2008
Lesson Title/Topic Areas:	Vocabulary Clues for Basic Operations	

## **Literacy Strategies Used:**

(Please discuss what literacy strategies you embedded in this lesson. What were your goals in using these strategies?)

The literacy strategy that I used was the List-Group-Label. I thought that if I could show the students that there were clue words that told us what operation we needed to use when solving a word problem, I might be able to help relieve a bit of their anxiety about word problems.

### Student Response to the Lesson:

(Was the strategy effective? Were students able to read/write as needed in this lesson? What attitudes were displayed? How did specific students and/or the class do? How did the literacy strategy aid in developing student understanding of the topic? Cite specific evidence from the samples of student work)

This strategy was a big success for the students! They were surprised at all the words that meant you needed to add or subtract, etc. I heard a lot of "I didn't know that meant to multiply," as well as several who said it helped to know what to do. Everyone took an active role in the group discussion and categorizing of the word list. There were several serious discussions as to where a word should go. The booklets the students made at the end were a great way of tying up the lesson and gave them something to use again and again.

#### **Lesson Reflection:**

(What worked well with this lesson? What challenges did you encounter in this lesson? Would you change certain aspects of the lesson or the questions that you asked? How does this influence future lesson planning?)

I really felt that this lesson was a success and that I wouldn't have changed any of it. The class I selected to work with is a group of 9 8<sup>th</sup> grade students that have all previously scored basic or below basic in the mathematics section of the ISAT. They want to learn any type of strategy to help them become more successful in mathematics and take a fairly active role in the lesson.

### **Relationship to Previous Instruction:**

(Have you taught this lesson/topic prior to the LIMSST project? If so, how did your teaching of this lesson differ from what you taught before? How did students' reactions to this lesson differ?)

I had taught this strategy prior to LIMSST, but didn't have a name for it. I use the same technique I have used before and will again.