



TEACHER PAGE

Lesson: Number Sentences with Spiffy

Teacher-Author: Donna Miller

ASSET Animator: (Joyce) Duangrat Viriyaampaivong

New AZ Standard 3, Patterns, Algebra and Functions Grades 1,2,3

Articulated 3M13-02 Find the missing sum or difference in number sentences for sums and minuends through 9., **3M23-02** Find the missing element (addend, subtrahend, minuend, sum, and difference) in addition and subtraction number sentences for sums through 18 and minuends through 9., **3M33-02** Solve equations with one variable using missing addends for sums of 18; using minuend through 18.

Materials:

Manipulatives: blocks, unifix cubes and anything used for counting.

Literature: *26 Letters and 99 Cents* by Tana Hoban. **Note:** This lesson can be adapted for grades 1-3. Number sentences are used in the AIMS test in Arizona, grade 3.

Learning Objectives: The student will be able to:

- identify a number sentence.
- interpret a story problem and write its number sentence.
- choose addition or subtraction to solve a problem.

Overview and Content:

When students writes and/or solves a story problem, they will need to write the answer in number sentence form. For instance, "Mary has 20 pieces of candy and gives Betty 13 pieces, how many pieces does Mary have left?" Giving the answer "7" pieces of candy is not acceptable. The answer needs to be written in number sentence form, $20 - 13 = 7$. In the lesson, students will be solving story problems. And writing number sentences.

Engage Students:

Use manipulatives for a quick way to work story problems. Also, using a book such as, *26 Letters and 99 Cents* by Tana Hoban, write related story problems using the information about comparing or contrasting the different amounts (of money). Ask students to write sentence or expression interpretations of those contrasting amounts.

Follow-up, extensions:

As students get older and more experienced, multiplication and division story problems may also be used for making number sentences—look at DIG DEEPER. As a challenge, multi-stepped problems may be included. In SO WHAT! students may practice test taking with a simulation of writing a story and building a number sentence from it. In TALK ABOUT IT! students play the Number Sentence Game making number sentences by lining up classmates (particularly good for younger students).

Assessment:

Students will interpret a story problem and choose a correct addition or subtraction number sentence as the answer.

