ADDITION – HORIZONTAL TO VERTICAL

Concepts:

Addition (horizontal to vertical), < and >, subtraction, even numbers, and "Thirty Days Hath September"

Objectives:

1. The student shall be able to rewrite a horizontal addition problem vertically and write the correct answer.
2. The student shall be able to circle the least of two given numbers.
3. The student shall be able to write the answer to a subtraction problem 10 - 18 using the number line.
4. When given an even number, the student shall be able to write the next three even numbers in sequence.

Teaching Tips:

1. Here is a practice aid to use with activities 1 and 2. Cut a large apple out of a 1/4 sheet of *poster board*. Write "+4" in the middle of the apple. Around the edge of the apple, cut 16 "v" shaped notches evenly spaced. Write a number by each notch using the numbers 0 - 15 in non-sequential order. Determine what the answer would be if you added the number by the notch and "+4." Write this number on the back side by the same notch. Do this for all other notches. In the middle of the back write "-4." Depending on which side you choose to use, this is a self check game for an individual student for addition or subtraction. Make several different apples with different numbers in the middle. If you use "+ 6" use numbers 0 - 13, (the number you are adding (+6) and the largest number you use around the notches (13) must equal 19 when added together), for "+8" use 0 - 11, for "+2" use 0 - 17, etc.

Materials, Supplies, & Equipment:

1. Flash cards for subtraction facts 1 - 18, < *and* >, and whole numbers
2. Number chart
3. *Addition subtraction game – poster board*

Activities:

1. Drill addition facts 1 - 18 using *Drill #2, Worksheet 38*.
2. Drill subtraction facts 1 - 9 with flash cards with the answers ***not*** showing. Drill subtraction facts 10 - 18 with flash cards with the answers showing.
3. Recite "Thirty Days Hath September."
4. Put a 3 number single digit horizontal addition problem and a 2 number double digit horizontal addition problem on the chalk board. ("3 + 5 + 4 = ___ "and "25 + 34 = ___ ") When the student(s) write the addition problems vertically, show them how all the ones go in a straight line and all the tens go in a straight line. Remind them that this makes it easier to add the numbers correctly. As they begin ***Student Activity One***, check each student to see if they are having any difficulty lining up the tens and the ones.
5. Read the directions for ***Student Activity Two*** to the student(s). Discuss with them how the meaning of the word "least" is the same as "less than" *(you might show the < and > flash cards)*. When they have a clear understanding of that meaning, they should be able to complete the activity by themselves. If necessary, have them mentally or actually place the < or > sign between the numbers to identify the smaller number.
6. Allow the student(s) to complete ***Student Activity Three*** independently, giving individual help where needed.
7. Discuss with the student(s) the meaning of even numbers (the numbers used when counting by twos). After telling the student(s) an even number, have them tell you the next three to follow. This is their first formal work dealing with sequences. ***Student Activity Four*** should be completed together being sure each student knows the number that goes in the first blank of each series. The number chart may be a help to some student(s) when doing this activity.

Worksheets:

1. *Worksheet 38* – Addition drill sheet