



REINFORCEMENT LESSON IN PLACE VALUE

Grade Level:
3-5

OVERVIEW: This is a lesson in place value that never fails to build excitement and generates groans of disapproval when it is time to quit. The level of difficulty can be varied based on the grade level and time of year.

PURPOSE: The purpose of this lesson is to build the students knowledge of place value utilizing a more hands on "thinking approach."

OBJECTIVES: Using prediction strategies, the students will show the ability to order digits to create the highest or lowest possible number.

RESOURCES/MATERIALS: Each student needs a copy of a game sheet and writing utensil. The teacher needs to have a copy of the games sheet on the overhead and a dice. I use a big dice, 4" X 4", made from a coffee cup gift box.

ACTIVITIES AND PROCEDURES:

Each student will have a piece of paper that is divided into columns and rows. The number of columns dictates how far you want the place value lesson to go, 5 rows goes into the tens of thousand, 3 rows into the hundreds. The number of rows dictates the number of games to be played. The teacher has a student roll the dice to see which is the first digit that needs to be placed. Once the digit is revealed, the student needs to decide where that digit should be placed. If the goal is to create the highest number into the hundreds and the first digit rolled is a 1, I would hope the student would not place it into the hundreds column but into the ones column instead. Once all the students have written down where that first digit is located then another student rolls the dice for the next number, and so on until all the needed digits have been rolled. When it is completed ask for someone to tell you what the highest possible number could have been, and see how many created that number. It is fun for the students to see if the teacher created the number too! This works well for the lowest possible number also.

TYING IT ALL TOGETHER:

As the year goes on I vary this lesson to include creation of multiplication problems and division problems. This is a good follow up activity to a more hands on introduction of place value. While the students are getting more practice in place value in a game like setting, the students who do not relate well to competition will still succeed by playing along and watching the other students volunteer information.

SUGGESTIONS/MODIFICATIONS

- The students may go outside to practice the place value game if there is not enough room.
- Students should understand that learning place value is an important step towards learning advanced math.
- The teacher may need to take a few months to teach and reinforce this lesson.

Related Lesson:

This lesson is for Level 2. The first time you do this lesson you need only some reasonable space. Later it may be better to use small pots or boxes with beads or stones.

The Lesson

1. Draw Two Boxes on the ground. - Tell the class that every person in the first box is the same as ten people in the second box.
2. Tell them also that the second box cannot have more than nine people in it. If a tenth person goes in then everyone must get out again and ONE of them goes to the small box.
3. Let them go into the box one by one and, on the board write the number in each box. When there is no one in any box write 00. Then 01, 02, 03, 04, 05, 06, 07, 08, 09.
4. When there are nine in the box already and the tenth one enters every one must run out of the box except for one who goes to the smaller box.
5. Wow you have ten on the board. Continue with 11, 12, etc.... until 19.
6. The same happens again leaving 2 in the small box and NONE (0) in the larger box.
7. Do this several times. The teaching Method This part of mathematics is very difficult, many children have problems with it. After using people you can then use stones in boxes or pots and use different kinds of stones for TENS and ONES. (Note: ONES are sometimes called UNITS)

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