You Write the Properties Lesson Plan

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| **Name:** | **311**  |  | **Course:** | Math |  | **Grade:** | 6th |
| **Unit:** | Variables, Expressions & Properties |
| **Big Idea:** | Properties of Operations |
| **Subconcept:** | You can add (or multiply) two numbers in any order. Three numbers can be grouped and added (or multiplied) in any order. 0+a=a and 1xa=a for any number a. The distributive property of multiplication over addition let you multiply a sum by multiplying each addend separately and then finding the sum of the products. |
| **Literacy Strategy(s):** | Small & Large Group Discussion; Read a Textbook; Modified (Not So) Silent Discussion; Journal Response |
| **Lesson:** | You Write the Properties |  | **Date Taught:** |  January 6, 2010 |
| **Learning Objective(s):** |
|  |  Students will be able to | Recognize the Commutative, Associative and Identity Properties of Addition and Multiplication. |
|  | Students will be able to | Recognize the Distributive Property and distinguish it from the Assocaitive Property. |
|  | Students will be able to | Describe what is happening within each Property. |
| **Idaho Standards (or National Standards if no Idaho Standards exist):** |
| 6.M.3.2.1 |

**Detailed Description of Lesson:** I grouped students for this lesson based upon their skill sets in Mathematics. I made 4 groups consisting of 3 or 4 students in each. With the envelopes prepared, I explained to students that they were going to be following the specific instructions inside each envelope and using the number cards in them to complete the activity in each one. They had 3 minutes to work with each envelope. I used a kitchen timer to keep track of the time. After completing the instruction set, they would write their answers on the Main Idea/Rules sheets that I passed out to each of them. Instead of having the students rotate (I don’t have room for 7 different areas) I moved the envelopes around the room. I waited until every group was finished writing their answers on the Main Ideas Sheet before we rotated to the next one. The next day (we ran out of time) we did the responses where I made the kids actually explain what the properties were “saying” to them.

**Handouts:** See Attached

**Student Work:** See attached

**Reflection:** This lesson worked quite well. It was a fun and easy way for me to check their understanding and skill with the different properties that we had been working with. It would be fun to try this lesson next year prior to giving direct instruction to the students in the different properties. I think that it would be a challenging introduction to each set of Properties. They kids really enjoy the game format and the envelopes keep everything neat and tidy. The grouping worked out fantastically! The kids could really talk to each other about what they were seeing at a level they could all understand. Even the kids who never do anything were actively participating and doing well! It was great!!**LIMSST Project Literacy Lesson Reflection Form**

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| --- | --- | --- | --- | --- |
| **Name:** | **311** |  | **Date lesson was taught:** | **January 6, 2010** |
| **Lesson Title/Topic Areas:**  |
| **You Write the Properties** |

**Literacy Strategies Used:**

(Please discuss what literacy strategies you embedded in this lesson. What were your goals in using these strategies? Be specific and use as much detail as possible.) Small & Large Group Discussion – Kids worked in small skill-based groups to determine which property was represented in each set of instructions/problems, and the following day, after responding to their follow-up questions, they discussed as a group how they came up with their reasoning. Read a Textbook – Those students who needed extra scaffolding used their book as a resource to help them identify which property they were working with; Modified (Not So) Silent Discussion – Instead of moving around, the envelopes moved to the groups, and the discussion to determine which property sometimes got heated. It was great fun! Journal Response – the kids had the follow-up questions that they answered to help ensure that it was more than just identifying the properties, but an understanding of what is happening within them and why.

**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)

The kids were quite animated and engaged during this lesson. They liked the fact that it was timed and that they could move on to another one. There was no disgruntled group of students even though they were obviously grouped by skill. They all worked hard and even the lowest groups worked without much required assistance.

**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?)

While the kids worked hard in this presentation, in changing it to be a challenging entry activity for Properties, I would have to modify it and do some differentiating to make it applicable to the low end group. They would require (I assume) some extra teacher time in thinking and discussing what is happening with the different numerical expressions. I’m glad that I found this 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 usually have the students make mobiles of the properties in an attempt to get them solidified in their heads. This requires me to assign one property to a pair of students and then there are others who don’t have the concept for the other properties that they were not assigned. This lesson really spread the wealth of knowledge to all the kids about all the properties. I will definitely use this again!