Trevor Mattea
Supervisory
Erika Johnson
September 28, 2011

Place Value Lesson Plan for A. and Y.

Date: Wednesday 9/28/11
Time: ~10:40am
Place: Barron Park Elementary, Room 9

Activity:
Plus-One Game and "Fantastic Number"

Context:
This lesson will be the third in a series of at least three lessons about place value, focusing on the idea of ones making groups of tens. Last week, A. and Y. traded counting cubes and rods to form representations of the same numbers in different ways, such as seventeen cubes traded for one rod with seven cubes.

Learning Objective:
Students will use counting cubes and place-value boards to answer questions about how many ones it takes to make a group of ten and record them.
Students will use counting cubes and place-value boards to form representations of the same "fantastic number," which will be no greater than the highest number they counted to in the previous activity, and record them.

Language Objective:
Students will speak and write the terms to describe place value: *ones, tens, digits*

CA Math Content Standard Addressed:
Grade Three: Number Sense
1.0 Students understand the place value of whole numbers:
1.3 Identify the place value for each digit in numbers to 10,000.

Materials/Prep
Assessment worksheets Counting cubes and rods Place-value boards Place-value charts Paper for "fantastic number"

Lesson Sequence:

Time	*Learning Activities*	*Purpose/Rationale*

0:00	**DIRECT INSTRUCTION:** Teacher: Before we get started with our activities today, I want to ask you three questions about the concepts we discussed last week and will discuss today and tomorrow. I want to see what you remember, what you already know, and the way you think about math right now. Teacher gives students assessments and pencils. Teacher: Last week, we traded counting cubes and rods to show that we can make the same number in different ways. Can you give me an example of using counting cubes and rods to make the same number? Teacher: This week, before we do an activity similar to trading cubes and rods, I want to show you an activity about digits and place value. I want to know how familiar you are with these concepts. What do you think a digit is? What numbers do you think are digits? Teacher: What do you think place value is? What do you think the difference is between the “1” in the number 1 and the “1” in the number 10? Teacher collects assessments and pencils.	Assess knowledge from previous lesson and for current lesson.
00:05	**GUIDED PRACTICE:** Teacher: First, we are going review how many ones it takes to make a group of ten by working with place-value boards and counting cubes as part of the Plus-One game with ten. Teacher gets out one-place value board, one place-value chart, and counting cubes. Teacher: The way we will play the Plus-One game with ten is by adding one cube at a time on the white side of the place-value board, which is labeled, “Ones,” until we have a group of ten. When we finally have ten cubes on the “Ones” side, we can trade them to put one	Reinforce last week’s concept by making connection between ones and groups of tens. Using counting cubes can help students explore the concept of place value in a concrete way.

	cube on the grey side of the place-value board, which is labeled “Tens.” Teacher: How many tens and how many ones are on the board now? Students: Zero tens and zero ones. Teacher: Yes! I am going to record that information on my place-value chart by writing a 0 digit in the tens place and a 0 digit in the ones place. I want you to write along with me. Teacher gives students place-value charts. Teacher: Now, I am going to add one cube to the “Ones” side, saying, “Plus one.” How many tens and how many ones are on the board now? Students: Zero tens and one. Teacher: Yes! I am going to record that information on my place-value chart by writing a 0 digit in the tens place and a 1 digit in the ones place. Be sure to write it down along with me. Now, I am going to add one cube to the “Ones” side, saying, “Plus one.” How many tens and how many ones are on the board now? Students: Zero tens and two. Teacher: Excellent! I am going to record that information on my place-value chart by writing a 0 digit in the tens place and a 2 digit in the ones place. Be sure to write it down along with me. Teacher continues to model activity until there are ten cubes on the “Ones” side. Teacher: Now I have ten cubes on the “Ones” side. I am going to trade these ten cubes on the “Ones” side for one cube on the “Tens” side.	

	Teacher clears cubes from the “Ones” side and replaces them with one cube on the “Tens” side. Teacher: I am going to record that information on my place-value chart by writing a 1 digit in the tens place and a 0 digit in the ones place. Be sure to write it down along with me. Teacher: Now, let’s see if you can continue playing Plus-One until we get to the number 30, recording the information along the way. Teacher gives students the place-value board and counting cubes.	
0:10	**INDEPENDENT PRACTICE:** Teacher: Now, let’s see if you can continue playing Plus-One together until we get to the number 30, recording the information along the way. If you disagree about whether about when a cube goes on the “Ones” side or the “Tens” side or when a group of cubes should be traded, I want you to explain your thinking to your partner. Teacher gives students the place-value board, counting cubes, and a pencil. Teacher collects students’ place-value board, place-value charts, and counting cubes.	Allow students to practice explaining their answers to other students and listening to other students’ explanations. Using counting cubes can help students explore the concept of place value in a concrete way.
0:20	**INDEPENDENT PRACTICE:** Teacher: Now, I want to play Fantastic Number with you. You counted up to 30 during Plus-One, so I want to pick a fantastic number close to 30. I will choose 27. Together, I want you to think of all the different combinations of counting cubes and rods to make 27, then I want you to record them on a piece of paper. Teacher gives students counting cubes and rods and paper. Teacher collects counting cubes and rods.	

00:25	**ASSESSMENT:** Teacher: Now I want to ask you a couple of questions about the concepts we discussed today and have you write your responses. Teacher gives students assessments and pencils. Teacher: First, are all numbers digits? Teacher: Next, what do you think people mean when they say they have 1 one? What about 2 ones? What about 3 ones? Teacher: Next, what do you think people mean they say they have 1 one? What about 2 ones? What about 3 ones? Teacher collects assessments and pencils.	Assessment knowledge from current lesson.