Pictures with Place Value Blocks Task 1

By: Denise Crutchfield

Student Objective: "I can compare and round two numbers."

Common Core Standards to	Mathematical Practices	Kagan Structures
Measure	Addressed	
3.NBT.1, Use place value understanding to round whole numbers to the nearest 10 or 100.	What do these look like in 3rd Grade?	KAGAN structures Planning Kagan Cards

Materials Needed:

Task 1 worksheet

Task 2 worksheet



Paper copies of Base 10 blocks (Paper copies of base ten blocks can be found in the back of your copy of **Developing Mathematics with Base Ten**)

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_	State and Rate	Setting Objectives and
G	Objective: "I can compare and round two numbers."	Providing Feedback
	Students rate themselves to the goal (1, 2, 3, 4).	
Engage Students with the Goal		
Access Prior Knowledge	Access prior knowledge with the base 10 smart board link below Base 10	Nonlinguistic Representations Generating and Testing Hypotheses
New Information	Ask student," What do you think the first letter of you name is worth?" "What number would you represent if you were to build the letter with place value blocks?" Today we are going to build the first letter of our names with place value blocks. Then we will compare our letters with partners.	Nonlinguistic Representations Summarizing and Note-Taking Identifying Similarities and Differences Cooperative Learning Cues, Questions, and Advance Organizers

Directions: Task 1 Have students use paper base ten blocks to build a picture. An example of building the first letter of the name is below **Example of a letter** The first letter of my name is I used tens and ones tens are worth ones are worth The first letter of my name is worth ____+ ____=___ Introduce the activity. Have students work with a partner Homework and Practice **Directions: Task 2** Cooperative Learning 1. Provide students with cards with <, >, = on them. Generating and 2. Have students work in pairs to compare the value of their picture **Testing Hypotheses** Application and round their number. Ask the student to show you which sign or place the sign in the middle that will make a true sentence. KAGAN structures (Pairs Check) 3. Allow students to verbally explain their number sentence. 4. Have students record their results on their recording sheet **Considerations:** Watch how students recognize the amount they need to represent. Observe for an understanding of place value, tens and ones. Can students read the standard numeral accurately? Can students representing the values? • Can the student tell you which is greater or less than, but demonstrate confusion with the symbol? • Students may not understand all symbols. Are they better with greater than, less than, or equal to? Make note if the student struggles as the values get larger. **Collecting Data:** Student performance can be scored with recording sheet below. An Assessment Sheet is attached below Setting Objectives and State and Rate **Providing Feedback** Objective: "I can compare and round two numbers." Students rate themselves to the goal (1, 2, 3, 4). **Revisit the Goal**

Math Workstation ideas for additional practice
with base ten.

Base Ten Pictures

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Build a picture below out of paper base 10 blocks. Record your result below

	My picture is v	vorth	
I used _	hundreds	tens and	ones
	hundreds a	re worth	_
	tens ar	e worth	
	ones ar	e worth	
	The notation for	my picture is:	

Student Recording Sheet

Task 2 Directions:

- 1. Provide students with cards that have <, >, = on them.
- 2. Have students work in pairs to compare the value of their picture and round their number. Ask the student to show you which sign or place the sign in the middle that will make a true sentence.
- 3. Allow students to verbally explain their number sentence.
- 4. Have students record their results on their recording sheet
- 5. Students will implement the Kagan structure Mix-Pair-Discuss.
- 6. The teacher will call time when students are to pair with a different partner in the room

The value of my letter is _____

My # Rounded	My Value	<,>,=	Partner Value	Partner's # Rounded
		<u> </u>		

Assessment

Name:
3.NBT.1 Add numbers to make each expression true.
> 143
217 <
385 =
< 200
630 -

465 > _____

Student performance can be scored with recording sheet

Student Name	Compares values accurately	Uses symbols accurately	Can explain and justify reasoning	Can round number