**Class:** Math, Gr.3 **Instructor:** Miss Kobbert

**Date:** Tuesday, November 22th 2016

**Time:** 75 Minutes

**Topic: Representation with Base Ten Materials**

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| **Objective:**   * **Students will practice representing numbers with base ten materials.**   **Key Questions:**   * **How can I show a number using base ten blocks?** |
| **General and Specific Learning Outcomes:**  **General Outcome:** Develop number sense.  **Specific Outcome 2:**  Represent and describe numbers to 1000, concretely, pictorially and symbolically. [C, CN, V]  **Specific Outcome 5:**  Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000. [C, CN, R, V] |

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| **Differentiation/Modifications:** | **Materials/Technology Needed:** |
| **Differentiation:**  Verbal and written instructions, chunking information, peer assistance, one-on-one teacher assistance, extra instructions, reviewing steps, individual and group work time.  **Modifications:**  Spend more time having students work with building numbers with base ten blocks before moving on the to Jump math book work and center. | **Materials:**  Base Ten Blocks and Jump math books  **Technology:**  SMART board |

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| **Time** | **Content/Description** | **Assessment Strategy** |
| 10 mins. | **Mad Minutes/Introduction**   * Students will practice their number facts in mad minutes. * They have a minute to complete as many questions as they can; when the time is up they have to drop their pencils. * Together we will mark them, students will check their own work in a different coloured marker. | Have students practice their number facts to check for improvement. **(FOR)** |
| 20 mins.  40 mins. | **Procedures/Activities:**  **Mini Lesson on Base Ten Blocks with Sample Questions**   * Demonstrate how to find 3 + 4 by taking 3 ones blocks and then another 4 ones blocks and placing them on the chart in order, so that the last block is on square 7.   ASK: How can I find 13 + 5 by using ones blocks and the hundreds chart?  ASK: How is the counting already done for them when they put the ones blocks on in order? Emphasize that they can see the answer by looking under the last ones block.   * Tell students that instead of using ten ones blocks to cover a row, you find it easier just to use one bigger block. Show them a tens block and ask if anyone remembers what the block is called. * Provide your students with the BLM “Hundreds Charts” as well as 10 tens blocks and 9 ones blocks each. * Have students use 3 tens blocks and 5 ones blocks and cover the squares in order.   ASK: How many squares are covered? How do you know? (They should look under the last ones block to see the number 35.) Repeat for several examples. (Ex. 41, 23, 59, 74, 99)   * Then ask students what number they get if they use two tens blocks and no ones blocks (20). 5 tens blocks? 7 tens blocks? 10 tens blocks? * Tell students that we used a tens block instead of ten separate ones blocks.  ASK: What can we use instead of 10 tens blocks? (a hundreds block) * Give students 2 hundreds blocks to add to their 10 tens blocks and 9 ones blocks.   ASK: What number do you get if you place a hundreds block on the first hundreds chart and then 3 tens blocks and 7 ones blocks in order on the next hundreds chart?   * Then show models of base ten blocks without using the hundreds chart and have students tell you what number is represented. EXAMPLES: 3 hundreds blocks, 4 tens blocks and 2 ones blocks; 5 hundreds blocks and 8 ones blocks. * Have students practice making numbers with blocks. * Now write only the expanded form and have students tell you what number is represented: * a) 7 hundreds + 5 tens + 3 ones * b) 9 hundreds + 0 tens + 6 ones * c) 8 hundreds + 1 ten + 1 one   **Math Centers: Math books, Computer Math and Math Games**   * After this base ten-block practice, have students move into their center groups. * Students will point to where their group is going before they move. Students will stay at each center for 12 minutes, before they switch when the bell goes. | Formative assessment while students work on questions. Begin to make mental notes of students’ abilities. **(FOR, AS)**  Check for understanding and provide extra explanation for students that are struggling. **(AS)**  Students will independently solve a sample question and share the answer. **(OF)**  Students will create numbers using blocks. **(OF)**  Observation for participation and effort, following of instructions, mentally noting the different abilities in the classroom, following expectations, ask questions to check for understanding. **(FOR, AS)** |
| 5 mins. | **Closure**   * Clean up center materials and have students move back to their desks. * Show students a number in blocks and have them write the number that is represented   Example: 3 hundreds blocks, 4 tens blocks and 2 ones blocks | Students will write the number that is represented in base ten blocks. **(OF)** |

**Lesson Reflection/Notes:**