**I can represent numbers using coins**

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| **Lesson Plan Title**  I can represent numbers using coins |
| **Lesson Summary**  Through a guided lesson students will recognize the value of pennies, nickels, and dimes .  \*This took me 3 separate lessons over 3 separate days. |
| **Curriculum Outcomes**  N05- Students will be expected to compare and order numbers up to 100  N04- Students will be expected to represent and partition numbers to 100 |
| **Assessment Of Learning or Assessment For Learning**  Observation, Conversation, Product  Observations   * Do students understand the value of a penny? A nickel? A dime? * Can students use a penny to represent a given number? Can students use a nickel to represent a given number? Can students use a dime to represent a given number? |
| **Communication/Vocabulary**   * Coins * Penny * Nickel * Dime * Quarter |
| **Technology**   * I can represent numbers using coins Key Note Presentation   <http://jkeithgrade2mathns.weebly.com/math-wall.html> |
| **Materials**   * Number line (created in lesson 1) * Cut outs of pennies, nickels and dimes (see appendix) * 100 pennies * 20 nickels * 10 dimes * Jar |
| **Mental Mathematics**  Review counting forwards by 2’s, 5’s, and 10’s (to 100) |
| **Development**  This lesson plan provides students the opportunities to see the sequences and patterns found in the hundreds chart/ number line and extend that knowledge to coins.  **Time to Teach**  Activate prior knowledge by asking students to count forwards and backwards by 2’s to 20 is what they needed to know in grade one). Show students a real penny/nickel/dime. Ask them if they know what they are looking at, and if they know the names of the coins.  Once students have looked at the coins. Have them think-pair-share their ideas. Usually students should think for at least a minute (maybe more). Once they have thought about the questions above have them go knee to knee to share their answers. Students may mis-name the coins, allow them to converse for a few minutes. Then have them share their answers and ideas. Once they have done that, start with the pennies (I do each coin on a separate day during mental math time). In the jar, add one penny (which represents one cent) up to the number one hundred.  **Time to Practice**  Then have the students colour in the cut outs of pennies brown OR tape up the real pennies above the number line. To represent 100. Then have students represent a variety of numbers (up to 30 to start) using pennies. Remember to teach children how to draw the cent sign. I usually do this initial task on white boards which allow students to fix their errors and talk to one another about their representations.  **Time to Share**  Have students share their representations on their white boards. Talk about how students represented coins (some may put circles around others may just right 1 with the cent sign). Remind students who have not used the cent sign, to include it. Then have students watch the key note presentation I can represent numbers using coins. This presentation includes pennies, nickels and dimes.  \* See below above ALL numbers to 100 are pennies, below 5’s are nickels and below 10’s are dimes.  Thaw Space:ssrsb:Pictures:iPhoto Library.photolibrary:Masters:2015:06:26:20150626-103220:IMG_0819.JPG  Thaw Space:ssrsb:Pictures:iPhoto Library.photolibrary:Masters:2015:06:26:20150626-103220:IMG_0820.JPG  Thaw Space:ssrsb:Pictures:iPhoto Library.photolibrary:Previews:2015:06:26:20150626-103220:QCstsV+JSpqOx4R+W7hm5A:IMG_0821.jpg |
| **Differentiation**   * For those students who do not understand money a guided math group would help them to work with coins- to 20 at first. * For enrichment students can represent higher numbers using coins, or start to use combinations of coins to represent numbers. |

Canadian Currency (coins 1)

**Canadian Currency (coins 2)Canadian Currency (coins 3)**

Coin designs courtesy of the Royal Canadian Mint / Images courtoisie de la Monnaie royale canadienne