**I can represent numbers using coins**

|  |
| --- |
| **Lesson Plan Title**I can represent numbers using coins  |
| **Lesson Summary**Students will be expected to use coins frames to represent numbers. \*Please note that you will be able to use this lesson more then once changing the range of numbers students will use.**Background**In grade one students were expected to represent numbers to 20. Students in grade one are not introduced to the concept of coins, this is a grade two concept and begins in Unit 1. |
| **Curriculum Outcomes**N04- Students will be expected to represent and partition numbers to 100 Performance Indicator N04.01- represent a given number using coins (pennies, nickels, dimes and quarters) |
| **Assessment Of Learning or Assessment For Learning** Observation, Conversation, ProductObservations* Daily checklist- Can students represent a number using coins on their white boards

Conversations* Can a student answer questions about coins. I have 35 cents I spent ten cents on a pencil, how much money do I now have?
* Can students tell you the value of two coins? I have two nickels and a dime how much money do I have?

Product* Can students represent a given/chosen number using coins? Can they do so efficiently (ie: 33 cents as 33 pennies is not the most efficient way)
 |
| **Communication/Vocabulary*** Pennies
* Nickels
* Dimes
* Quarter
* Coins
* Change
* Money
* Cents
 |
| **Technology*** I can represent numbers using coins- Key Note Presentation

<http://jkeithgrade2mathns.weebly.com/partitioning.html>* I-pad/Digital Camera to take pictures of work with plastic coins (if necessary)
 |
| **Materials*** Number Line with coins taped above (see Lesson 3 Math Wall)
* Paper or Plastic Canadian Coins for students
* What coins are in his pocket (see below)
* Anecdotal Record sheet (<http://jkeithgrade2mathns.weebly.com/general-assessment.html> )
 |
| **Mental Mathematics**Ask students to solve basic questions involving coins. I have 2 dimes, how much money do I have? I have 5 nickels how much money do I have? I have one quarter and two pennies how much money do I have? (etc.) During this time, you may want to make note of students who do not answer, or who answer with random answers. Ask students to share their strategies of how they solved these problems in their heads. |
| **Development**This lesson is a lesson that you could adapt to different situations. You could have students represent on white boards, or use their math journals to answer similar questions.**Time To Teach**Activate prior knowledge by asking students to identify which coin above the number line is a penny, nickel, dime and quarter. Once students have identified all of the coins explain that students will be using coins today to represent a number. Students may need to be taught how to draw each coin (see below)10 **¢**5 **¢**1 **¢****Time to Practice**Once students are comfortable with the language and how to draw coins. Hand them the What Coins are in his Pocket? Sheet. Read the sheet one time to the students so they know what to do, then explain to them that this is an independent activity to see what their grade 2 brains can do, not someone elses. Set a timer for 10 minutes and tell the students they must work without asking for help on the sheet for this amount of time. This allows you to see what the students can do rather then what you do to help them.**Time to Share**When finished have students share the combination of coins that could be in the pocket in small groups. They can re-check each others work to be sure that their counting is accurate. |
| **Differentiation*** Drawing may be an issue for some students, use plastic coins, or paper coins that they can glue into onto their sheets. If you use the plastic coins they could use an i-pad to take a picture of their work and glue it into their journal
* Some students may need to continue representing a number of coins, they may not be ready to show which coins could be in the pocket.
* Quick finishers should be asked to use a different combination of coins that could be in the pocket.
 |

**I can represent a number using coins- Steps**

**Step 1: Get your math journal**

**Step 2: Put your name on the math sheet**

**Step 3: Work on the sheet for 10 minutes on your own**

**Step 4: If you finish early find another combination of coins that could be in the pocket.**

Name:

What coins are in his pocket?

Pierre has 53 Cents in his pocket. He has at least 2 dimes, and 2 nickels. Show the money that could be in Pierre’s pocket. In the space below.



**Canadian Currency (coins 2)**