**Level: Gr 5**

**Category: Numeracy**

**Title of Lesson: Getting to 1 000 000**

**Goals/Objectives:**

Big Idea: Numbers to 1 000 000 represent quantities that can be decomposed into smaller numbers.

Curricular Content:

• number concepts to 1 000 000

• addition and subtraction to 1 000 000

Curricular Competencies: visualizing and representing number; communicating number

**Materials Needed:**

* Deck of Cards

**Task Instructions: (Step by Step)**

**Activity 1: Visualizing and Decomposing Numbers**

Choose a number: 10 000 or 500 000 or 1 000 000 or 2 500 000

What different ways can you represent the number?

Try and think of at least five different ways.

Consider using symbols, pictures, words, grids/arrays, equations, etc.

Choose a number: 9999 or 10 500 or 250 450 or 793 250 or 1 000 000

What ten different ways can you decompose it?

Decompose means break into parts (ie. 5 561 can be decomposed into 5000 and 500 and 50 and 1OR into 3000 and 2500 and 30 and 31 and many other ways).

How will you show your thinking?

Choose an amount: $50 000 or $750 500 or $1 000 000

What are some different ways can you make this amount with bills? What is the largest Canadian bill?

What are three items that cost about this much?

**Activity 2: Fluency Practice**

Highest Number:



Take the face cards out of the deck. Remind players that A=1. Shuffle and deal out the deck so each player has a pile of cards in front of them. Players flip up 5 cards and then make the biggest number they can. They then read out this number—the one at right would be five thousand, seven hundred and twenty six.

The person who makes the highest number keeps the cards.

Variations: Use 6 cards to go to 100 000’s, use 7 cards to go to 1 000 000!

Adaptation: Use cards 3 cards to review hundreds place value.

**Activity 3: Open Question**

If you are given the digits 1 to 9, make an addition question and a subtraction question. What is the biggest answer you can make using each digit only once (and no zero value numbers allowed)?

How do you know it is the biggest?

Can you visually show how you know this is the biggest?

Example: 93 764 – 52 180 = ? or 937 645 – 5 218 = ?

**Activity 4: On-Line Exploration**

Here’s a game about place value, if you haven’t had too much screen time this week: <https://www.iknowit.com/lessons/d-place-value-millions.html>

**Adaptations/Adjustments: (consider different environments)**

-Look at the activities in the Grade 4 Week 1 Lessons

**Extensions (Optional):**

-Extend activities to 10 000 000 and beyond.

References:

SD38-Janice Novakowski

https://www.weareteachers.com/math-card-games/