Lesson Title: Math: adding and subtracting decimals to the hundredth 1/2 Course:Grade 4 Math

## **Learning Outcomes/Intentions**

## Outcome:

4.7 Demonstrate an understanding of decimal numbers in tenths and hundredths (pictorially, orally, in writing, and symbolically) by:

describing

representing

relating to fractions.

- (b)Represent a decimal concretely or pictorially.
- (d)Represent a decimal using money (dimes and pennies).
- (e)Record a money value using decimals.
- (f)Provide examples of everyday contexts in which tenths and hundredths are used.
- (g)Model, using manipulatives or pictures, that a tenth can be expressed as hundredths (e.g., 0.9 is equivalent to 0.90 or 9 dimes is equivalent to 90 pennies).

## N4.8

Demonstrate an understanding of addition and subtraction of decimals limited to hundredths (concretely, pictorially, and symbolically) by:

using compatible numbers

estimating sums and differences

using mental math strategies

solving problems.

Physical:

Spiritual:

- (b)Solve problems, including money problems, which involve addition and subtraction of decimals, limited to hundredths. e)Count back change for a purchase.
- (f)Explain the strategies used to determine a sum or difference.
- (g)Represent a sum or difference of two decimals concretely or pictorially, and record the solution to the sum or difference symbolically.

Understandings: Buying items, ordering restaurants and making change are daily tasks that we are required to do during our day. Understand how a decimal is represented in money	Essential Questions:  Where do we use the addition and subtraction to the hundredths in everyday life?  Why is it important to know how to add and subract to the hundredths?
Knowledge: Know how to add purchase prices Know how to make change Know how to determine sums and differences Know how to represent numbers to the hundredth using money.	Skills: I can represent a number to the hundredths, using money I can record monetary value using decimals I can give examples of where we use hundredths in everyday life I can solve money problems using addition and subtraction, by totalling purchases and making change
Lesson Objectives	
Mental: Emotional:	

Assessment Evidence (Evaluate)
Formative Assessments (Assessment for Learning):
Diagnostic assessment –
Formative assessment -
Summative Assessments (Assessment of Learning):
DIfferentiated Learning
Sabrina: setting even priced menu items Emily: With assistance of Kim: setting even priced menu items, and coin sorting in patterns, coin recognition.
Materials
22 Money worksheets for making change 10 cheat sheets for money chart, one per table 10 Brainstorm the menu, one per table 10 Pick the Menu 22 Build a Taco (4, 5, 6) 15 Build a designer taco (8 ingredient- for those who are ready for it) 22 taking orders (4 ingredient) Play money, bills( 20, 10, 5) coin (quarters, dimes, nickles, pennies) White boards and markers  Differentiated learning: money patterns

TIME:

Learning Experiences & Instruction:

ENGAGE

Last week Mrs Young talked about addition and subtraction to the tenths. Using our white boards, answer these questions:

- 1. 1.3 +1.7=
- 2. 4.0 2.2=
- 3. now what about this one: 1.35+1.15=

when we are adding or subtracting to the tenths, how many decimal points do we need? What about for the hundredths?

By raising your hands:

Where do you think we use representation of hundredths and addition and subtraction of hundredths in every day

Why is it important to know how to add and subtract to the hundredths?

Who here likes money? Does anyone ever get an allowance or birthday money? My kids favorite thing to do with allowance or birthday money is to go the the store to buy candy. By show of hands do any of you here like to use your money to buy treats at the store?

How is familiar with money? If I hold up this, show me with your boards how you would represent this in decimal form tot he hundredths?

So if I want to go to the store and buy a bag of chips that is \$1.87 and a bottle of water, because I am making healthy choices, and avoiding all the sugar in pop, and my bottle of water is \$2.12. How do I write represent those numbers in decimal format? Use your white boards and show me one dollar and 87 cents? now what about 2 dollars and 12 cents? Now what is the total amount of my purchase? (3.99) Now if I am going to pay with a \$5 dollar bill, how do we represent that in decimal points to the hundredths? Can anyone show me how to write that equation, to figure out how much change i need to get back?

Go over work sheet (?)

## **EXPLORE:**

Today and tomorrow we are going to be learning and practicing with addition and subtraction and using money in our transactions.

Have you all ever heard of a food truck before? Have you visited one? Today each table is going to be creating your own menu for your very own Taco Truck.

Who here likes tacos?

The first thing you are going to do as a group is built your menu, what you need to come up with are options for these three categories:

Shells

Meats

Toppings

Condiments

Using your white boards lets do a quick brainstorm on what are options for each category?

What would be a reasonable price for each topping category and why?

In your groups, you are going to come up with a list of options with prices for each topping for each category/ Please keep in mind that each price must be reasonable.

		EXPLAIN:
		ELABORATE:
Reflection		
	N/A	