One-Dollar Words
Add Decimals and Make Words

Materials Needed
○ Pen or pencil
○ Paper
○ Optional: coins

Grade Range
3-5
6-8

Topics/Skills
Math: Place Value; Base Ten Numerals; Addition; Symbols; Sentence Construction

Learning Standards
CCSS Math: Number & Operations in Base Ten
CCSS ELA: Production and Distribution of Writing

Duration
20 – 30 minutes

Prep Time
5 minutes

How expensive is your name? In this activity, you will find out how expensive your name is, write and translate words, and practice adding decimals all at the same time.

Activity Challenge
Find the value of your name using a letter and number equivalency chart.

Preparation
1. Review the Materials Needed list and gather materials.
2. Watch this video (https://bit.ly/2ZL6WaJ) to get a refresher on how to add decimals.
3. Have the equivalency chart on the next page handy.

To Do
1. Estimate the value of your name using the Values of Letters Equivalency Chart from the next page.
2. Using pencil and paper, calculate the actual value of your own name. Optional: Use coins to show the value of your name.
3. Write down the name of a family member and find the value of your family member's name.

Example: John Smith = J O H N S M I T H
J = 0.10 O = 0.15 H = 0.08 N = 0.14 S = 0.19 M = 0.19 I = 0.12 T = 0.20 H = 0.08
0.10 + 0.15 + 0.08 + 0.14 + 0.19 + 0.12 + 0.20 + 0.08 = 1.19
So, the value of John Smith = $1.19

4. Write down a name of a family member and find the value of your family member's name. Whose name is worth more?
5. Find the value of 10 different color words. Show how you know the value of colors. What's the most expensive color you can find?

Example: R = 0.18 E = 0.05 D = 0.04
0.18 + 0.05 + 0.04 = 0.27
So, the value of red = $0.27

Observations
Whose name is worth more? What's the numerical difference between names? Why do some words have the same length but different values? What does value mean?

Extensions
- Convert decimals to fractions.
- Challenge yourself further and complete RAFT's Secret Language Learning Activity Sheet.
- Create your own Letters Equivalency chart and find the values of different words.
- Create a game using coins and the equivalency chart.

The Content behind the Activity

In math, every digit in a number has a value. Place value is the value represented by a digit in a number based on its position in the number. The idea of place value is at the heart of our number system. Zero was invented to hold the place for a specific value when no other digit goes in that place. For example, the number 200 in words means two hundred, no tens and no ones. Decimals are a way to represent numbers with values less than one. Place value shows the value of each number before and after the decimal point, such as the value of dimes and nickels ($0.10 and $0.05, respectively). For example, if one dollar ($1.00) is worth 100 cents, a dime is worth 10 cents and in decimal form is written as $0.10, where the one is in the tenths position and has a place value of 1/10. In other words, a dime is worth 1/10 of a dollar.

Values of Letters Equivalency Chart

a = $0.01	h = $0.08	o = $0.15	v = $0.22
b = $0.02	i = $0.09	p = $0.16	w = $0.23
c = $0.03	j = $0.10	q = $0.17	x = $0.24
d = $0.04	k = $0.11	r = $0.18	y = $0.25
e = $0.05	l = $0.12	s = $0.19	z = $0.26
f = $0.06	m = $0.13	t = $0.20	ñ = $0.27
g = $0.07	n = $0.14	u = $0.21	