Lesson 4 Activity 1 – Place Value Recap!

One of the easiest ways to understand how the principles of place value apply to decimal numbers is to look at our monetary system. Our money is made up of dollars and cents. The dollars are the whole numbers and the cents fill the first two decimal places – the tenths and the hundredths.

Consider the difference between $50.50 and $50.05. In both amounts, $50 is the same, but the first number shows 50 cents while the second number shows 5 cents.

  	 
$50.50	**$50.05**

In Lesson 1, you learned three basic things to remember about our number system:

1. Our number system is based on just 10 numbers from 0 to 9.

2. The largest number that can be in one place is 9.

3. The value of a number depends on where it is placed in relation to the other numbers.

These three ideas are valid for all decimal numbers. All that changes is the order of the names of the columns.

The table below shows how the value of a number changes based on the place value of the column in which it is placed. Note the name at the top of each column.

Number	tenths	hundredths	thousandths	ten thousandths
0.4526	4	5	2	6
0.3024	3	0	2	4
0.7800	7	8	0	0

The table below shows another way to show how the place value of each digit based on its column. Note that zeroes are used to fill any empty places between the digit and the decimal point.

Number	tenths	hundredths	thousandths	ten thousandths
0.4526	0.4	0.05	0.002	0.0006
0.3024	0.3	0.00	0.002	0.0004
0.7800	0.7	0.08	0.000	0.0000

A clear way to indicate how the value of a digit varies depending on the column in which it is located is to write a number in words.

When you read numbers to the right of decimal points, read them as whole numbers but end by inserting the value of the last column in the number. Read the numbers in the table below.

Number	Read as ...
0.6	six tenths
0.45	forty-five hundredths
0.324	three hundred twenty-four thousandths
0.7800	seventy-eight hundred ten thousandths (or seventy-eight hundredths)
0.4526	four thousand five hundred twenty-six ten thousandths