Decimal Place Value

Math-Ms.Harrietha

As you move to the right, each position represents ten times less as the position to it's left.

100 000 000	10 000 000	1 000 000	100 000	10 000	1000	100	10	1	•	$0.1 = \frac{1}{10}$	$0.01 = \frac{1}{100}$	$0.001 = \frac{1}{1000}$
Hundred Millions	Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Units	•	Ten <u>ths</u>	Hundred <u>ths</u>	Thousand <u>ths</u>

Place Value Chart

Behind the decimal point each place value ends with "ths".

903.417

When reading a number with a decimal the decimal point is read as and.



In a decimal, the farther a number is to the right, the smaller its value.











Hundredths



Thousandths

Reading and Writing Decimal Numbers

We read this number as:

Three and 2 hundred sixty-eight thousandths

We write this number in:

standard form: 3.268

3.268

expanded form: 3+ 0.2+0.06+0.008

Reading and Writing Decimal Numbers

0.013

We read this number as:

Zero and thirteen thousandths

We write this number in:

standard form: 0.013

expanded form: 0.01+0.003

Most of the decimals we see deal with money. Money is written out in decimal form when you have more than whole dollars. We know decimals mean more than the whole dollar.

Decimals and Money

For example:

\$5.33 \$16.03 \$430.18



			U	nderline t	he	Digit
1)	Un	derline the digit	in tł	nousandths plac	ce.	
	a)	756.218	b)	3.672	c)	821.053
2)	Un	derline the digit	in o	nes place.		
	a)	2.70	b)	13.586	c)	562.1
3)	Un	derline the digit	in h	undreds place.		
	a)	197.8	b)	823.40	c)	261.349
4)	Un	derline the digit	in te	enths place.		
	a)	423.16	b)	5.2	c)	235.46
5)	Un	derline the digit	in te	ens place.		
	a)	729.85	b)	962.5	c)	80.403
6)	Un	derline the digit	in h	undredths place	e.	
	a)	473 529	b)	12 896	c)	3 602

Decimals in our World

What are some examples of where we see decimal numbers in the world besides money?

Decimal Numbers

A guitar pick is 0.73 mm thick.

STANDARD FORM: 0.73 mm

EXPANDED FORM: 0.7+ 0.03



<u>WORD FORM</u>: Zero and seventy three hundredths.

Decimal Numbers

The fairy fly is the world's smallest insect. It is 0.0139 cm long.

<u>STANDARD FORM</u>: 0.0139 cm

EXPANDED FORM: 0.01 + 0.003 + 0.0009



WORD FORM:

Zero and one hundred thirty nine ten thousandths.

Comparing Decimal Numbers

Write six decimal numbers on your piece of paper.

Trade your numbers with a classmate and order your partners from least to greatest and greatest to least. Use your place value chart to help.

Sanitize your hands before and after trading papers.







- B) Write each set of decimals in decreasing order.
- 1) 26.8, 15.5, 15.9, 36.7, 26.2

2) 8.132, 10.11, 19.258, 16.2, 10.4