

Place Value Chart

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

|  | - | - -me | [-" - | - | - - |  | * |  | (in) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | - | $=$ | $\pm$ | -- | - | - | - | - $=-$ |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

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



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.


## Tenths

氠

Comen

## Hundredths




## Thousandths

0 $\qquad$
$\qquad$

$\qquad$

## Reading and Writing Decimal Numbers

We read this number as:
3.268

Three and 2 hundred sixty-eight thousandths
We write this number in:
standard form: 3.268
expanded form: $3+0.2+0.06+0.008$

## Reading and Writing Decimal Numbers

We read this number as:
0.013

## Zero and thirteen thousandths

We write this number in:
standard form: 0.013
expanded form: 0.01+0.003

## Decimals and Money

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.

## For example:

## \$5.33

## \$16.03

\$430.18

## Underline the Digit

1) Underline the digit in thousandths place.
a) 756.218
b) 3.672
c) 821.053
2) Underline the digit in ones place.
a) 2.70
b) 13.586
C) 562.1
3) Underline the digit in hundreds place.
a) 197.8
b) 823.40
C) 261.349
4) Underline the digit in tenths place.
a) 423.16
b) 5.2
C) 235.46
5) Underline the digit in tens place.
a) 729.85
b) 962.5
C) 80.403
6) Underline the digit in hundredths place.
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?

A guitar pick is 0.73 mm thick.

STANDARD FORM:
0.73 mm

## EXPANDED FORM:

$0.7+0.03$

WORD FORM:
Zero and seventy three hundredths.

## Decimal Numbers

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

STANDARD FORM:
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.

## Comparing Decimals

Compare each pair of decimals using the symbols $\rangle,<$ or $=$.

1) 11.038 $\square$ 11.038 2) 39.26 $\square$ 39.16
2) $\quad 1.22$ $\square$ 1.221
3) $30.359 \square 29.349$
4) $\quad 3.43$ $\square$ 3.425

## Ordering Decimals

A) Write each set of decimals in increasing order.

1) $21.018,21.105,21.003,21.888,21.357$
2) $18.19,22.38,38.27,12.24,22.77$
$\qquad$
B) Write each set of decimals in decreasing order.
3) $26.8,15.5,15.9,36.7,26.2$
4) 

8.132, 10.11, 19.258, 16.2, 10.4

