Name: $\qquad$
Period: $\qquad$ Metrics

## Metric System

For everyday measuring in the United States, we use the British system of pounds, gallons, and feet. The rest of the world and science uses the easier metric system.



6 Steps for Conversions
1.
2.
3.
4.
5.
6.

## A Decimal System

You can convert between metric units by simply moving the decimal the correct number of places.

Just move the decimal!


REMEMBER:
"Left for Larger" Larger Prefix: Move the Decimal Left.

Example
How many feet in 4.5 Meters?
$(1 \mathrm{ft}=0.305 \mathrm{~m})$

Notice how many times the decimal moves between each prefix.

1
1000.0
1000000.0 100000000.0 1000000000.0 1000000000000.0
megameter $(\mathrm{Mm})=$ kilometer $(\mathrm{km})=$ meters ( m ) = centimeters $(\mathrm{cm})=$ millimeters $(\mathrm{mm})=$ micrometers ( $\mu \mathrm{m}$ )

## How Big Are They?

## Volume

1 liter = just bigger than a quart $1 \mathrm{~mL}=$ volume of a small marble


1 quart


It's important to have a sense of these units so we are not just talking numbers. A good scientist knows if a number makes sense.

## Mass

$1 \mathrm{~kg}=2.2$ pounds
1 gram = 1 dollar bill
1 gram

## LENGTH

$1 \mathrm{~mm}=$ width of a fingernail
$1 \mathrm{~cm}=$ width of your pinky
1 meter $=3.3 \mathrm{ft}$ (just bigger than a yard) 1 kilometer $=0.6$ miles


