

# The Metric System (aka the "decimal system")

Two basic methods include conversion from larger to smaller units and conversion from a smaller unit a larger unit.

## **Method A Conversion from a larger to a smaller unit.**

When changing 3 units from larger to smaller multiply by 10 3 times *or* 1000 to move the decimal three spaces to the right

Multiply by 10 for each unit decreased:

Change 1 gram (g) to milligrams (mg)

$$1 \times 10 \times 10 \times 10 = 1000\text{mg}$$

$$1\text{g} \times 1000 = 1000\text{mg}$$

**OR**

$$1 \text{ g} = 1.000 \text{ mg (1000mg)}$$

It is done the same way for converting from 2 units and one unit larger

**Method B Conversion from a smaller unit to a larger unit**

Divide by 10 for each unit increased or move the decimal one space to the left for each unit changed

Example: Change 1500 milliliters (ml) to liters:

$$1500\text{ml} \div 1000 = 1.5 \text{ L}$$

OR

$$1500\text{ml} = 1\ 500. \text{ L (1.5L)}$$

**Now you try!**

Now you need to know some basic apothecary /household measurements