## **Converting in the Metric System**

Converting units of measurement in the metric system means that you are multiplying or dividing by  $10,\,100,\,1000,\,$  etc. That's pretty easy – and it basically means moving the decimal point of your number! Here's how you do it.

Remember the metric units of measurement are preceded by a prefix, and the prefixes can be remembered by the saying:

$\mathbf{K}_{ing}$	$\mathbf{H}_{enry}$	$\mathbf{D}_{ied}$	by	$\mathbf{d}$ rinking	Chocolate	$\mathbf{m}_{ ext{ilk}}$
			(base)			
Type of measurement:			meter			
	length, mass, capacity	, \	gram			
			liter			

Step 1: Find the letter of the prefix of the unit you are converting FROM (eg: for centimeter, C = prefix); if no prefix, you are at the BASE

Step 2: Find the letter of the prefix of the unit you are converting TO

Step 3: Draw an arrow in the direction you move FROM your start point TO your end point under the number you are changing.

Step 4: Count how many places you are moving: put that number under the arrow.

Step 5: MOVE THE DECIMAL POINT of your starting number in the direction of the arrow, the number of places indicated under the arrow.

Step 6: Fill in any required placeholder zeros

That's it!!!

Let's practice:

 $90 \text{ mm} = \underline{\qquad} \text{ cm}$   $1,400 \text{ mm} = \underline{\qquad} \text{ cm}$ 

 $50 \text{ cm} = \underline{\hspace{1cm}} \text{mm}$   $200 \text{ cm} = \underline{\hspace{1cm}} \text{dm} (\text{note} - \text{small d} = \text{deci!})$ 

 $.42 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$   $6.74 \text{ m} = \underline{\hspace{1cm}} \text{ km}$