

Metric Measurement Worksheet/Activity

In science, the metric system or SI system is used. The metric and SI systems are decimal systems based on units of 10.

The system relies on using prefixes and standard basic units. The most common basic units that we will be using this year are the meter (for length or distance), the gram (for mass) and the liter (for volume).

Remember the prefixes:

Kilo = 1000	Kilo-hecta-deca- <u>meter</u> -deci-centi-milli
Hecta = 100	
Deca = 10	

Deci = 1/10	
Centi = 1/100	
Milli = 1/1000	We will only be using the kilo, centi and milli prefixes. However, the conversions are much easier to remember, if you remember the entire set. On this worksheet you will be asked to make actual metric measurements as well as to convert from one metric unit to another.

1. Using a piece of string, find the distance around your waist, wrist, and head. Make your measurements in whatever unit seems convenient and then convert to the other units.

My waist = _____ m = _____ cm = _____ mm
 My wrist = _____ m = _____ cm = _____ mm
 My head = _____ m = _____ cm = _____ mm

2. How tall are you in centimeters? _____ cm In meters? _____ m

3. Obtain a penny, nickel, dime, and quarter. What are the diameter and thickness of each coin, in millimeters? Fill in the chart below, being sure to include units.

	Penny	Nickel	Dime	Quarter
Diameter				
Thickness				

4. Using a meter stick, find out how far you can leap in a standing broad jump.

_____ m = _____ cm = _____ mm

5. Estimate the size of the 5 objects listed below in the space provided. Include metric units with your estimates. Use appropriate units.

6. Then, actually measure the 5 objects and record your results. Don't forget units!

<i>Object</i>	<i>Estimate (with units)</i>	<i>Actual Size (with units)</i>
Diameter of a pencil		
Length of the Room		
Height of the Room		
Length of a Battery (including the button)		
Circumference of a Battery		

7. Complete the following conversions:

a. 5.89 m → cm

b. 100mm → cm

c. 2.67cm → m

d. 20mm → m

e. 5567.8m → km

f. 3325cm → m

g. 256m → mm

h. 13567mm → m