Name _____ ___ Date _____
Science _____ **Metrics WS #2**

Scientists all over the world use the same system of units so they can communicate information clearly. This system of measurement is called the **International System of Units (SI)**. Metric measurement is based on the number ten and makes calculations with the system relatively easy. By using the following conversion chart, converting from one unit to another is done simply by moving the decimal point:

Kilo- Hecto- Deca- _____ Deci- Centi- Milli-

The blank line in the middle of the conversion chart can change depending on what we are measuring:

The unit for length is the meter (m).

The unit for mass is the gram (g).

The unit for volume is the liter (L).

PART A

List the general property to its correct units. Choices are in the last column.

1. g/mL _____
2. s _____
3. km _____
4. g _____
5. cm^3 _____
6. mm _____
7. mg _____
8. L _____
9. g/cm^3 _____

density
length
mass
time
volume

PART B

For each of the following commonly used measurements, indicate its symbol. Use the symbols to complete the following sentences with the most appropriate unit. Units may be used more than once or not at all.

_____ milliliter _____ milligram _____ kilometer _____ centimeter

_____ kilogram _____ millimeter _____ second _____ gram

_____ meter _____ liter

1. Colas may be purchased in two or three _____ bottles.
2. The mass of a bowling ball is 7.25 _____.
3. The length of the common housefly is about 1 _____.
4. The mass of a paperclip is about 1 _____.
5. One teaspoon of cough syrup has a volume of 5 _____.
6. Stand with your arms raised out to your side. The distance from your nose to your outstretched fingers is about 1 _____.
7. On a statistical basis, smoking a single cigarette lowers your life expectancy by 642,000 _____, or 10.7 minutes.

PART C

Convert the following metric measurements (SHOW YOUR WORK):

a) 1000 mg = _____ g

b) 198g = _____ kg

c) 8 mm = _____ cm

d) 160 cm = _____ mm

e) 75 mL = _____ L

f) 6.3 cm = _____ mm

g) 109 g = _____ kg

h) 50 cm = _____ m

i) 5.6 m = _____ cm

j) 250 m = _____ km

k) 5 L = _____mL

l) 26,000 cm = _____ m

m) 14 Km = _____ m

n) 16 cm = _____mm

o) 56,500 mm = _____ km

p) 1 L = _____ mL

q) 65 g = _____ mg

r) 27.5 mg = _____ g

s) 480 cm = _____ m

t) 2500 m = _____ km

u) 923 cm = _____ m

v) 27 g = _____ kg

w) 355 mL = _____ L

x) 0.025 km = _____ cm