Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Measurement PowerPoint Class Notes**

**International System of Units (SI)**

* Modern version of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Based on a decimal system which uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ unit
* Can measure very large and small quantities
* Universal measuring system used world wide
* Easy to convert and use. No fractions

**King Henry Died Monday Drinking Chocolate Milk**

K = \_\_\_\_\_\_\_ H = \_\_\_\_\_\_\_ D = \_\_\_\_\_\_\_ M = \_\_\_\_\_\_\_ D = \_\_\_\_\_\_\_ C = \_\_\_\_\_\_\_ M = \_\_\_\_\_\_\_

Base units:

Length – \_\_\_\_\_\_\_\_

Volume – \_\_\_\_\_\_\_\_

Mass – \_\_\_\_\_\_\_\_

**Conversion Hints**

Smaller to Larger Units

* + \_\_\_\_\_\_\_\_\_\_\_\_\_\_ by unit of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**OR**

* + Move \_\_\_\_\_\_\_\_\_\_\_\_\_\_ correct # of times to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Example:

10 mm = ? cm

10 mm /10 = 1 cm OR \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Larger to Smaller Units

* + \_\_\_\_\_\_\_\_\_\_\_\_\_\_ by unit of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**OR**

* + Move \_\_\_\_\_\_\_\_\_\_\_\_\_\_ correct # of times to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Example: .20 dm = ? mm

.20 dm \* 100 = 20mm OR \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Weight**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Measured in *pounds (lbs)*
* Can change depending on the force of gravity in the area
  + - Example: If you move to the moon, you’ll lose a few pounds because there is less gravity.

**Mass**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Depends on the number and kinds of atoms that make up an object
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** changes
* Measured by using a balance in grams (g)
* Formula: mass equals the density multiplied by the volume

M = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Volume**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Liquid: measured in milliliters (ml) with graduated cylinders and beakers
* Formula: volume equals the mass divided by the density

V = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Volume can also be calculated if given the dimensions of an object

V = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Density**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Measured in grams/milliliters (g/ml) or grams/cubic centimeter (g/cm3)

Note:1 ml = 1 cm3

* Formula: density equals the mass divided by the volume

D = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Temperature**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* SI unit is *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*
* Measured with a thermometer in *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* 
  + 0°C (freezing) to 100°C (boiling)
* Convert to Fahrenheit (°F) or Kelvin (K)
* Human body temperature is 37°C