STUDY GUIDE: Metrics Name:_____

Summary of the Metric System

MEASUREMENT	UNITS	TOOLS / EQUIPMENT
DISTANCE 1. Length 2. Width 3. Height	Kilometer (km) **METER (m)** Centimeter (cm) Millimeter (mm)	1. Meter stick 2. Metric ruler 3. Metric wheel or tape
VOLUME The amount of **space** an object takes up.	**LITER (l)** Milliliter (ml)	1. **Regular-shaped object** V = LxWxH (ruler) 2. **Irregular-shaped object** Water displacement method Graduated cylinder
MASS The amount of **matter** in an object.	Kilogram (kg) **GRAM (g)** Milligram(mg)	**BALANCE** NOT A SCALE A scale measures weight

Milli	Centi	Deci	METER	Deka	Hecto	Kilo
1/1000	1/100	1/10	LITER	10X	100X	1000X
	(less than basic unit)		GRAM		(more than basic unit)	

1. Be familiar with the 3 basic types of measurement and their units:
   Distance (meters), volume (liters), and mass (grams).

2. Know the definitions and equipment used to calculate distance, volume and mass.

3. Know which method is used to calculate the volume of a regular shaped object (LxWxH) and an irregular object (water displacement).

4. Understand which prefixes are larger or smaller than the basic unit and if given a prefix like "kilo" know what it means. - Remember the "metric ladder"

5. Memorize the metric chart and prefixes on this page or in your notes (page # _____)

6. Be able to explain how the weight of an object can change but not the mass. Also understand how the mass of an object can change. (Essay questions)

7. Be able to use a metric ruler, graduated cylinder and balance to measure items for the exam.