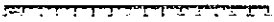
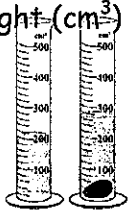

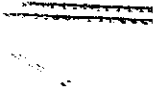


METRIC AGAIN?

The standards of measurement used by scientists are those of the **metric system**. The metric system is important because of its simplicity and convenience. All the units are based on 10 or multiples of 10. As a result, conversions between units are easy to do. The metric system was originally established in France in 1790. The **International System of Units** (abbreviated **SI**, after the French name *Le Systeme International d'Unites*) is a revised version of the metric system. It was adopted by international agreement in 1960. The SI has seven base units of measurement (meter, kilogram, second, ampere, kelvin, mole, candela). From these, other SI units of measurement such as volume, density, and pressure are derived. It is possible to report all measured quantities in SI units, however non-SI metric units are preferred for convenience or practical reasons.

Quantity	SI base unit or derived SI unit	Equipment used to measure:
Length	Meter (m)	Metric ruler 
Volume	Cubic meter (m ³) or liter (L)	For regular shape: length x width x height (cm ³) For irregular shape: graduated cylinder + water (mL) 
Mass	Gram (g)	Triple beam or electronic balance 
Density	Grams per cubic centimeter (g/cm ³)	Density = $\frac{\text{mass}}{\text{Volume}}$
Temperature	Kelvin (K) or degree Celsius (°C)	Thermometer or temperature probe 
Time	Second (s)	Stopwatch 