

NAME:

PERIOD:

DATE:

MEASURING SYSTEMS NOTES**1. The English or US CUSTOMARY or Imperial system:**

- The English system is used by the United States, and almost no other countries. Almost every country in the world uses the Metric system.
- English units were based on random amounts that were handy at the time.
Ex. a foot was as long as a king's foot
- Units are related by many different numbers.
Ex. There are 12 inches in 1 foot, but 3 feet in 1 yard.
- Fractions are used for measuring.
Ex. 5½ inches or 2¼ cups
- Abbreviations don't always match the unit because some units' abbreviations came from other languages.
Ex. The abbreviation for pounds is lbs, because "lb" was the abbreviation for "*Libra pondo*" which were Roman units. *Libra pondo* is from the Latin language that the Romans used. The English system got "pound" from *pondo*, but then kept "lb" from *libra* as the abbreviation.)

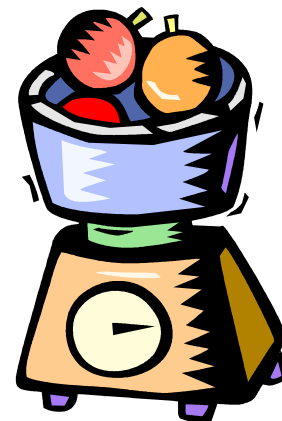
**English units:**

Length: inch, foot, yard, mile
Mass: pound, ounce, ton

Volume: quart, pint, tablespoon, cup, gallon
Temperature: degrees Fahrenheit (°F)

2. The Metric system:

- Almost every country in the world uses the Metric system. All scientists and all medicine uses the Metric system to make information sharing easier.
- The number 10 was used to relate all the units to each other.
Ex. Each unit is 10x larger than the unit below it and 10x smaller than the unit above it.
Ex. There are 10 centimeters in 1 decimeter and 10 decimeters in 1 meter
- All Metric units were based on water because people all over the world have water.
Ex. Celsius is based on water's boiling (100°C) and freezing (0°C) points
Ex. 1 cubic centimeter of water takes up 1 milliliter of space and has a mass of 1 gram.
- Decimals are used for measuring.
Ex. 3.75 kiloliters or 0.06 centigrams
- The Metric system uses base units. Base units are like a root word in English. Prefixes are added to base units to make larger or smaller units. The base units are meter (for length), liter (volume), and gram (mass & weight)

**Metric units:**

Length: some kind of meter (cm, m, km)
Mass: some kind of gram (cg, g, kg)

Volume: some kind of liter (cl, L, kl)
Temperature: degrees Celsius (°C)

Neither system is more accurate,
but the Metric system is easier when it comes to converting, and adding, subtracting, multiplying, or dividing measurements.

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