**Vocabulary: Unit Conversions**



**Vocabulary**

* Base unit – a unit in the *metric system* on which other units are based.
	+ Examples of base units include meters (length), grams (mass), seconds (time), and liters (volume).
* Cancel – to cross out, remove, delete, or invalidate something.
	+ In an algebraic expression, identical terms found in the numerator and denominator can be cancelled, such as the unit “seconds” in this equation:

120 seconds • 1 minute = 2 minutes

 60 seconds

* Conversion factor – a ratio or fraction equivalent to one that is used to multiply or divide a quantity when converting from unit to another.
	+ For example, the conversion factor for seconds to minutes is:

 60 seconds

 1 minute

This conversion factor is equivalent to one because 60 seconds is equal to
1 minute.

* Dimensional analysis – a technique in which cancelling units is used to obtain the correct solution to a problem.
* Metric system – a system of units developed in France in 1790.
	+ The metric system consists of base units and *prefixes*.
	+ The modern version of the metric system is the International System of Units, or *Système Internationale* (SI) in French.
* Prefix – a word or symbol placed before a unit that multiplies that unit by a power of 10.
	+ Examples of metric prefixes include *micro-* (1/1,000,000), *milli-* (1/1,000), *centi-* (1/100), and *kilo*- (1,000).
	+ Prefixes can be applied to any unit in the metric system.
* Scientific notation – a convenient method of writing very large or very small numbers.
	+ A number in scientific notation consists of a number between 1 and 10 multiplied by a power of 10.
		- For example, 41,600,000 in scientific notation is 4.16 × 107.