SI (pronounced ess-EYE) is the abbreviation for the *Système International d'Unités*, the modernized version of the metric system that the U.S. and other nations have agreed to use. (Do *not* abbreviate it as S.I.)



This list is provided to point out the correct way to use the metric system and to show many of the incorrect examples of its usage that may be given on package labels and in other printed matter. These correct ways to use SI are set by the international standards that define the SI.

# **Important in SI-metric:**

- 1. The short forms for SI units (such as mm for millimeter) are symbols, not abbreviations.
- 2. SI symbols never end with a period unless they are the last word in a sentence.
  - **RIGHT:** 20 mm, 10 kg
  - **WRONG:** 20 mm., 10 kg.
- 3. SI symbols should be preceded by digits and *a space must separate the digits from the symbol*.
  - **RIGHT:** It was 300 mm wide. The millimeter width was given.
  - **WRONG:** It was 300mm wide. The mm width was given.
- 4. Symbols always are written in the singular form (even when more than one is meant).
  - **RIGHT:** 1 mm, 500 mm, 1 kg, 36 kg
  - **WRONG:** 500 mms, 36 kgs
  - **BUT:** It is correct to pluralize written-out metric unit names: 25 kilograms, 250 milliliters
- 5. The symbol for a compound unit that is *a quotient of two units is indicated by a solidus* or by a negative exponent.
  - **RIGHT:** km/h or km $\cdot$ h<sup>-1</sup> (for kilometers per hour)
  - WRONG: kmph or kph (do *not* use p as a symbol for "per".)
  - **BUT:** It is correct to say or write "kilometers per hour".
- 6. The meaning of an SI symbol can be changed if you substitute a capital letter for a lower case letter.
  - **RIGHT:** mm (for millimeter, which means 1/1000 of a meter)
    - **WRONG:** MM or Mm (M is the prefix for mega, which means one million; a megameter is a million meters)

The **symbol for liter** (or litre) may be either a capital el (L) or a lowercase el (l); both are correct. In the U.S., Canada, and Australia, the capital el (L) is preferred, but most other nations use the lowercase el (l).

#### More information for students and teachers can be found at

### www.metric.org

<b>Correct Usage</b>	Examples of Incorrect Usage	For
km	Km, km., KM, kms, K, k	kilometer
m	M, m.	meter
mm	Mm, mm., MM	millimeter
L or l	L., l.	liter
mL or ml	ML, Ml, mL., ml., mls	milliliter
kg	KG, KG., Kg, Kg., kgr, kgs, kilo	kilogram
g	G, G., g., gr, gm, GR, GM, GRM, grms	gram
μg	mcg <sup>1</sup>	microgram
h	hr, hrs, HR, h., HR., HRS.	hour
S	sec, S, SEC, sec., s., S.	second
cm <sup>3</sup>	сс	cubic centimeter
km/h	KPH, kph, kmph, km/hr	kilometer per hour
kHz	KHz, KHZ, Khz	kilohertz
MHz	MHZ, Mhz	megahertz
hPa	HPa, HPA, Hpa, mb	hectopascal
kPa	KPa, KPA, Kpa	kilopascal
°C	C, deg C, ° C, C°	degree Celsius
K	°K, deg K	kelvin

# **Examples of incorrect SI-metric usage:**

<sup>1</sup>Because the handwritten symbol " $\mu$ g" looks almost exactly like "mg" and is therefore a frequent cause of overdoses, the abbreviation "mcg" is preferred in the medical field. See <u>The Joint</u> <u>Commission recommendations</u>.

# Some explanations:

The **spellings** of meter and metre [or liter and litre] are both correct. In the U.S., the meter and liter spellings are used most often; but the English-spellings used in most other nations are metre and litre.

In a strict sense, spelling and pronunciation are matters of language and are *not* set by the international standards that define SI. But, in keeping with the pronunciation of the other SI units involving prefixes, which all accent the first syllable, the USMA-preferred **pronunciation** of the word, kilometer, is KILL-oh-meet-ur, (*not* kill-AHM-it-ur).