

METRIC CONVERSIONS:

In many math and science classes, students are required to convert from one metric unit to another. This can be difficult, especially because we do not use the metric system in America. I have learned a great mnemonic to make this process easier:

<u>K</u> ing	<u>H</u> enry	<u>D</u> ied	<u>B</u> y	<u>D</u> rinking	<u>C</u> hocolate	<u>M</u> ilk
<u>k</u> ilo-	<u>h</u> ecto-	<u>d</u> eca-	<u>B</u> ASE*	<u>d</u> eci-	<u>c</u> enti-	<u>m</u> illi-

larger unit -----> smaller unit

*NOTE: “base” indicates the basic metric units gram, liter, or meter

Large unit to small unit: Each time you hop from *left to right*, you move the decimal over one place to the right (filling in any empty spots with zeroes). This takes a small number of a larger unit and converts it into a large number of a smaller unit.

Example: Convert 8 kilometers to centimeters.

Going from kilo- to centi- requires five “hops” to the right, so move the decimal after the 8 five places to the right, filling in the empty spots with zeroes. The answer is 800,000 cm.

Small unit to large unit: Each time you hop from *right to left*, you move the decimal over one place to the left (filling in any empty spots with zeroes). This takes a large number of a smaller unit and converts it into a small number of a larger unit.

Example: Convert 352 milligrams into kilograms.

Going from milli- to kilo- requires six “hops” to the left, so move the decimal after the 2 six places to the left, filling in the empty spots with zeroes. The answer is 0.000000352.