Practice determining units of ten between pairs of prefixes found in the table:

a) deka and hecto – deka's value is 10, hecto's value is 100; there are two jumps required to get from deka to hecto. The numerical value is 10 X 10, or 100

b) gram and kilo – gram's value is 1, kilo's value is 1000; there are three jumps required to get from gram to kilo. The numerical value is 10 X 10 X 10, or 1000

c) centi and deka – centi's value is 1/10, deka's value is 10; there are two jumps required to get from centi to deka. The numerical value is 10 X 10, or 100

Practice determining the conversion values for each of the following problems:

a) 382 ml = _____ L

Step 1 – 382 ml
Step 2 – 382 ml x $\frac{\text{____L}}{\text{ml}}$ …. It is three jumps from ml to L; the numerical value is 10 X 10 X 10, or 1000

Step 3 – 382 ml x $\frac{\text{__1__L}}{\text{1000 ml}}$
Step 4 – $\frac{\text{382 x 1L}}{\text{1000}}$

Step 5 - .382L

b) 2.2 dm = _____ mm

Step 1 – 2.2 dm
Step 2 – 2.2 dm x $\frac{\text{_____mm}}{\text{dm}}$ It is two jumps from dm to mm; the numerical value is 10 X 10, or 100

Step 3 – 2.2 dm x $\frac{\text{100 mm}}{\text{1 dm}}$
Step 4 – $\frac{\text{2.2 x 100 mm}}{\text{1}}$

Step 5 – 220 mm

c) 56 cm = ____ deka

Step 1 – 56 cm
Step 2 – 56 cm x _____ deka It is three jumps from cm to deka; the
Cm numerical value is 10 X 10 X 10, or 1000
Step 3 – 56 cm x ___1___deka
1000 cm

Step 4 – $\frac{56 \text{ deka}}{1000}$

Step 5 - .056 deka