

Unit 1: Ch 1-2 – Measurements/S.I. Units/Metric Conversions

What is chemistry?

- DEFINITION:

Fundamental vs Derived Measurements:

- FUNDAMENTAL –

- Ex:

- Ex:

- DERIVED –

- Ex:

- Ex:

Common Lab Instruments:

- #1 Graduated Cylinder –

- More _____ lines = More _____ measurement.

- #2 Erlenmeyer Flask –

- #3 Volumetric Flask –

- Measures _____ volume of _____.

- #4 Volumetric Pipette –

- #5 Beaker –

- #6 Electronic Scale (Balance) –

Metric System (SI) – International System of Units: *Refer to handout of SI Units and metric prefixes*

Draw **METRIC LINE:**

PRACTICE: DIMENSIONAL ANALYSIS

Ex #1) METRIC - How many deciliters (dL) are in 28.0 hectoliters (hL)?

Ex #2) METRIC – How many kilometers are in 419 nanometers?

Ex #3) METRIC - How many micrometers (μm) are in 2.85 kilometers (km)?

Ex #4) METRIC – How many nanometers (nm) are in 0.438 milligrams (mg)?

Ex #5) NON-METRIC - How many seconds are in 39 days?

Ex #6) NON-METRIC - How many kilopascals (kPa) are in 843 cmHg? * $101.3 \text{ kPa} = 760 \text{ mmHg}$