

Chapter One – Matter & Measurements

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- Pure Matter – Only one thing. Can be an atom or a compound.
- Mixture – More than one thing.
 - Homogenous: Evenly distributed
 - Heterogenous: Not homogenous
- Separation of Mixtures:
 1. Distillation – Based on boiling into vapor and cooling vapor down
 2. Extraction – Based on solubility
 3. Filtration – Based on size
 4. Chromatography – Based on affinities/attraction (significantly more complex than others)

- Measurements: Length, Volume, Mass, Temp, Pressure

	Temp	Freeze	Boil
• Fahrenheit		32	212
Celsius		0	100
Kelvin		273	373

- All measurements have uncertainty. The less uncertainty, the more accurate a measuring device is.
- Significant Figure Counting Rules:
 1. All non-zeros count
 2. Zeros
 - (a) Leading – Never count
 - (b) Captive – Always count
 - (c) Trailing – Count if right of decimal count, or left of a decimal point

Ex. 505 has 3 significant figures, 500 has one