**Quiz 1**

# Directions: Answer each of the following questions. Be sure to use complete sentences where appropriate. For full credit be sure to show all of your work. Where appropriate answers should be boxed for clarity, written to the correct number of significant figures, and, include the proper units.

1. Define accuracy (2 points).

Accuracy is the freedom from random error. It answers the question how close is a measurement to the true value?

1. Classify each as an element, compound, or mixture (3 points):
	1. Neon, Ne \_\_\_\_element
	2. Carbon dioxide, CO2 \_\_\_\_compound
	3. Soil \_\_\_\_mixture
2. Name the following compounds (10 points):
	1. MgS \_\_magnesium sulfide
	2. PCl5 \_\_phosphorus pentachloride
	3. HI (aq) \_\_hydroiodic acid
	4. Fe(NO3)3 \_\_iron(III) nitrate
	5. (NH4)3PO4 \_\_ammonium phosphate
3. Oceanographers often express the density of sea water in units of kilograms per cubic meter. If the density of sea water is 1.025 g/cm3 at 15 °C, what is its density in kilograms per cubic meter (5 points)?

$$1.025\frac{g}{cm^{3}}×\frac{1 kg}{1000 g}×\left(\frac{100 cm}{1 m}\right)^{3}=1025 \frac{kg}{m^{3}}$$