# Non Sibi High School

## Andover's Chem 550/580: Advanced Chemistry Chapter 2, Review Quiz 1

#### 1

Convert the following:

- a. 0.040 milligrams neon to number of neon atoms
- b.  $7.43 \times 10^{25}$  magnesium atoms to kilograms magnesium

### 2

The density of liquid  $C_2H_4(NH_2)_2$  is 0.90 g/mL. What is the volume in liters of  $1.08\times10^{26}$  molecules of  $C_2H_4(NH_2)_2$ ?

#### 3

The density of solid  $C_{12}H_{22}O_{11}$  is 1.59 g/cm<sup>3</sup>. How many molecules are in 0.075 m<sup>3</sup> of  $C_{12}H_{22}O_{11}$ ? How many carbon atoms are in this sample?



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