CH1011 Tutorial 1

Name:

1. How many **significant figures** in the following numbers:

2.304e-6

0.0010

2.0010

- 2. What is the alkaline metal in the 3rd period and how many **protons** does it have? Write down the **atomic symbol** for this element and include the **atomic number**.
- 3. **Balance** the following equation:

 $C_2H_6(g)$

 $O_2(g)$

 \rightarrow

 $H_2O(1)$ +

 $CO_2(g)$

4. The above equation is a **combustion reaction** between ethane and oxygen that is responsible for the formation of CO₂ which is one of the major green house gases. If 300g of ethane were combusted in a reaction vessel with 900g of oxygen how much carbon dioxide would be formed in kilograms (kg)?

5. Provide an **IUPAC** name for each of the following compounds: P_4O_6 V_2O_5 H_2SO_3

Additional information:

Atomic masses

C 12.0 H 1.0 O 16.0