**Homework #13 Chemistry 1114 due Wednesday 25 Oct 2017 15 pts**

**Your name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**What is the acid (A), base (B) conjugate base (CB) and conjugate acid (CA)**

**in the reactions below: (1 pt each/2 pts total)**

**HSO4- + HSO3 - 🡪 SO42- + H2SO3**

**HTeO3- + HPO42- 🡪 H2TeO3 + PO43-**

**What are the oxidation numbers for the elements in the compounds listed below:**

**HBr H\_\_\_\_\_ Br\_\_\_\_\_ 1 pt**

**CO2 C\_\_\_\_\_ O\_\_\_\_\_\_ 1 pt**

**N2 N\_\_\_\_\_ 1 pt**

**H2SO4 H\_\_\_\_\_ S\_\_\_\_\_\_ O\_\_\_\_\_ 2 pts**

**What are the oxidation numbers for all the elements in the reaction: 3 pts**

**CuSO4 + Mgo 🡪 Cuo + MgSO4**

**\_\_ \_\_ \_\_ \_\_\_ \_\_\_ \_\_\_ \_\_ \_\_\_**

**What are the oxidation numbers for all the elements in the reaction: 3 pts**

**CH4 + 2O2 🡪 CO2 + 2H2O**

**\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_**

**What element is oxidized in the last reaction? \_\_\_\_\_\_\_\_\_\_\_ 1 pt**

**What species is reduced in the last reaction ? \_\_\_\_\_\_\_\_\_\_ 1 pt**