Quiz: Standard Molar Enthalpies of Formation Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Calculate the enthalpy change for the combustion reaction of acetic acid (CH3COOH) in closed system. (Acetic acid is also called ethanoic acid). Round and record your answer to 4 significant figures.
2. The following reaction shows how iron(III) oxide is converted into iron(IV) oxide.

3Fe2O3(s) + CO(g) → 2Fe3O4(s) + CO2(g)

Calculate the enthalpy change when 5.00g of Fe2O3(s) is consumed?

1. Calculate the molar enthalpy of formation for hexane (C6H14(l)) based off the thermochemical equation below.

2 C6H14(l) + 19 O2(g) → 12 CO2(g) + 14 H2O(l) + 8325.8 kJ