**Writing Complete Equations Quiz**

*Write the complete, balanced equations that correspond to each of the following chemical reactions. (5 pt each – 1 pt formulas, 1 pt balance, 1 pt states, 1 pt arrow, 1 pt H)*

1. When cadmium metal (Cd) is placed in an aqueous solution of silver nitrite (AgNO2), silver metal (Ag) and dissolved cadmium (II) nitrite (Cd(NO2)2) are formed.
2. If a solution of sulfuric acid (H2SO4) is combined with solid sodium hydroxide (NaOH), water and dissolved sodium sulfate (Na2SO4) are formed, as well as lots of heat.
3. If solid iron (III) bicarbonate, Fe(HCO3)3, isheated at 1200° C, carbon dioxide, steam (H2O), and iron (III) oxide (rust, Fe2O3) areformed in an exothermic reaction.
4. When boron powder (B) is compressed with nitrogen gas (N2) at very high temperatures and pressures, boron nitride (BN) crystals are formed. The creation of BN is extremely exothermic.
5. When liquid hydrogen peroxide (H2O2) is shaken vigorously, hydrogen gas (H2) and oxygen gas (O2) are formed. This reaction gives of an extremely large amount of heat.