



# BIG Chem



## BLITZ Unit 7

PRINT NAME \_\_\_\_\_ PERIOD \_\_\_\_\_

\*\*\* You MUST USE INK. You may use your notes, but no help from others.

\* **BE SURE TO BALANCE YOUR EQUATIONS!**

\* **SHOW ALL STEPS**

\* **WATCH FOR DIATOMIC ELEMENTS.**

1. Find the number of grams of ammonia ( $\text{NH}_3$ ) that are formed from 2.00 g of hydrogen ( $\text{H}_2$ ).
2. Using  $Q = mc\Delta t$ , find how much heat will raise the temperature of 4.66 g of  $\text{CCl}_4$  from  $20.9^\circ\text{C}$  to  $76^\circ\text{C}$ . From the table,  $c$  for  $\text{CCl}_4$  is  $0.856 \text{ J/g}\cdot^\circ\text{C}$ .
3. Find  $\Delta H$  for making 193 g of  $\text{NH}_4\text{Br}$  from  $\text{NH}_3$  and  $\text{HBr}$ . From the table, the  $\Delta H$ 's in  $\text{kJ/mol}$ :  $\text{NH}_4\text{Br} = -270$ ,  $\text{NH}_3 = -46.2$ ,  $\text{HBr} = -36.2$
4. DEFINE and GIVE an example of these:  
  
    endothermic reaction  
    exothermic reaction  
    activation energy
5. DRAW and LABEL the curves for Endothermic and Exothermic reactions.