Name:_____
Blk:___Date:_____

**Chemistry 11**
**More on Endothermic and Exothermic Reactions**

There are TWO DIFFERENT ways that a chemical equation can be written to illustrate if it is an endothermic or exothermic reaction:
1.

2.

For an EXOTHERMIC REACTION:

For an ENDOTHERMIC REACTION:

MEMORY AIDS:

1. SUNG TO THE TUNE OF FRERE JACQUES:
Endothermic x2
Heat goes in
Exothermic x2
Heat leaves

2. In the English language it is common to state the positive before the negative: + → -
Positive ΔH
Negative ΔH

1. Draw an energy diagram having a $\Delta H = +25$ KJ

2. Draw an energy diagram have a $\Delta H = -50$ KJ

3. If the $\Delta H = -50$ KJ for the reaction F→G. Re-write this equation to show the 50KJ on the correct side of the chemical equation.

4. If a reaction absorbs 30 KJ of heat, what is the $\Delta H$ for the reaction?

5. If a reaction gives off 40 KJ of heat, what is the $\Delta H$ for the reaction?

6. If P→Q +25 KJ, what is the $\Delta H$ for the reaction? Which have more energy, the reactants or products?

7. Draw an energy diagram for the reaction R→P +10 KJ. Will the surroundings feel warmer or cooler as the reaction proceeds?