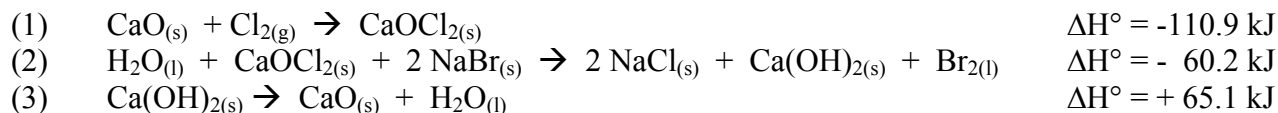


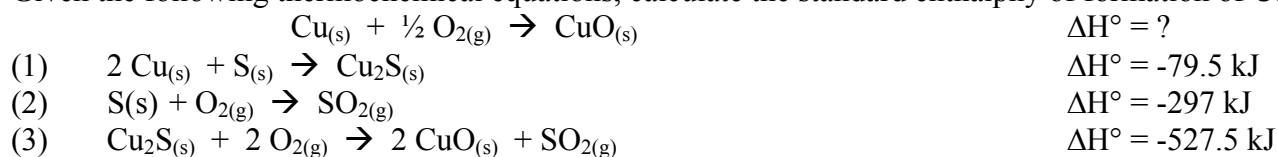
Name: \_\_\_\_\_

### Hess's Law Group Problem Solving Activity

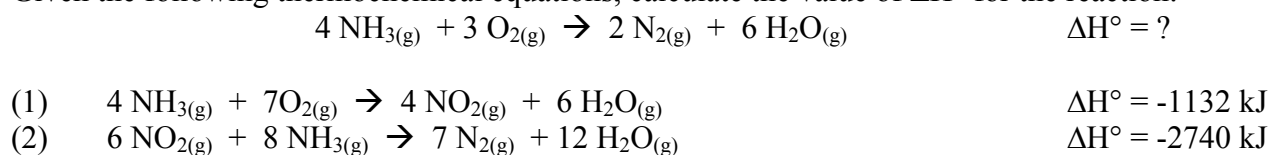
1. Given the following thermochemical equations, calculate the value of  $\Delta H^\circ$  (in kilojoules) for the reaction:  $\frac{1}{2} \text{Cl}_{2(g)} + \text{NaBr}_{(s)} \rightarrow \text{NaCl}_{(s)} + \frac{1}{2} \text{Br}_{2(l)}$   $\Delta H^\circ = ?$



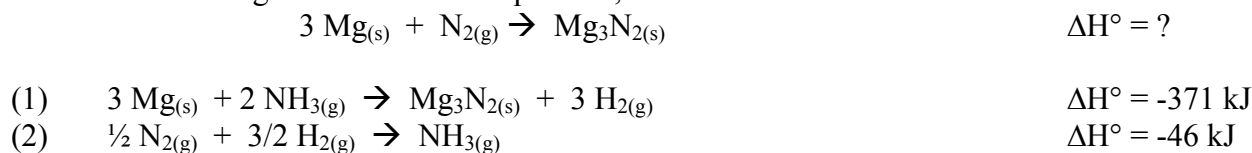
2. Given the following thermochemical equations, calculate the standard enthalpy of formation of  $\text{CuO}_{(s)}$ :



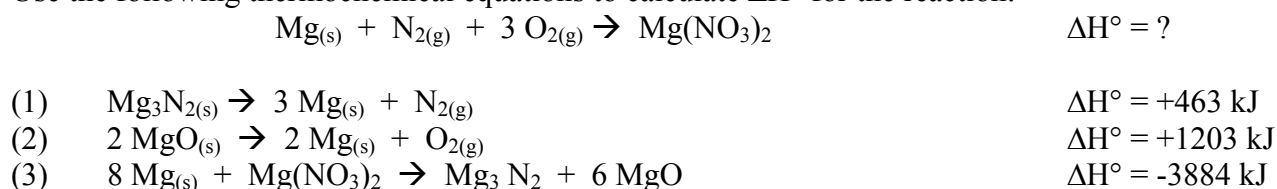
3. Given the following thermochemical equations, calculate the value of  $\Delta H^\circ$  for the reaction:



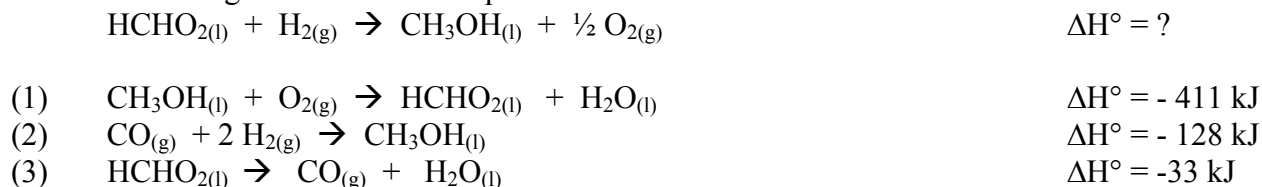
4. Given the following thermochemical equations, calculate  $\Delta H^\circ$  for the reaction:



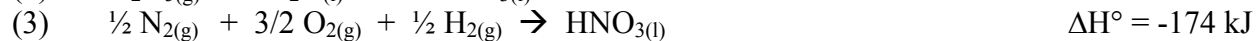
5. Use the following thermochemical equations to calculate  $\Delta H^\circ$  for the reaction:



6. Use the following thermochemical equations to calculate  $\Delta H^\circ$  for the reaction:



7. Use the following thermochemical equations to calculate  $\Delta H^\circ$  for the reaction:



8. Use the following thermochemical equations to calculate  $\Delta H^\circ$  for the reaction:

