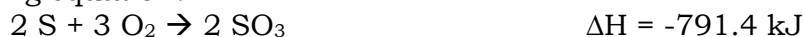


**Enthalpy Stoichiometry Worksheet**

1. How much heat will be released when 6.44 g of sulfur reacts with excess O<sub>2</sub> according to the following equation?



2. How much heat will be released when 4.72 g of carbon reacts with excess O<sub>2</sub> according to the following equation?



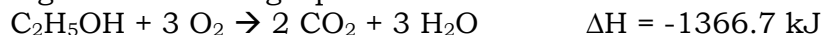
3. How much heat will be absorbed when 38.2 g of bromine reacts with excess H<sub>2</sub> according to the following equation?



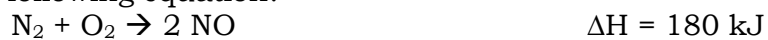
4. How much heat will be released when 1.48 g of chlorine reacts with excess phosphorus according to the following equation?



5. How much heat will be released when 4.77 g of ethanol (C<sub>2</sub>H<sub>5</sub>OH) reacts with excess O<sub>2</sub> according to the following equation?



6. How much heat will be absorbed when 13.7 g of nitrogen reacts with excess oxygen according to the following equation?



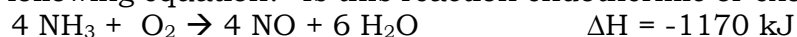
7. How much heat will be released when 11.8 g of iron reacts with excess oxygen according to the following equation?



8. How much heat will be released when 18.6 g of hydrogen reacts with excess  $\text{O}_2$  according to the following equation?



9. How much heat will be transferred when 14.9 g of ammonia reacts with excess  $\text{O}_2$  according to the following equation? Is this reaction endothermic or exothermic?



10. How much heat will be transferred when 5.81 g of graphite reacts with excess hydrogen according to the following reaction? Is this reaction endothermic or exothermic?

