2. Write a balanced chemical equation for each reaction observed.

3. No combination reactions were described in the Procedure section for this experiment. Give an example of a combination reaction from an earlier experiment. Write the balanced equation for the reaction.

   Fe(s) + S(s) → FeS(s)  (Experiment 2)

4. Although no combustion reactions were described in the Procedure section, one combustion reaction did occur in the course of this experiment. What was this reaction? Write its balanced equation below.

   The combustion of H₂ gas in the burning splint test in Step 4:

   \[ 2H_2(g) + O_2(g) \rightarrow 2H_2O(l) \]