Name: Kew

Balance the following chemical reactions

$$L_{2}(g) + 6H_{2}(g) \longrightarrow NH_{3}(g)$$

$$\frac{1}{2}$$
 C<sub>2</sub>H<sub>2</sub>(g) +  $\frac{5}{5}$  O<sub>2</sub>(g)  $\longrightarrow \frac{4}{5}$  CO<sub>2</sub>(g) +  $\frac{1}{2}$  H<sub>2</sub>O(g)

$$\frac{1}{2}$$
 H<sub>3</sub>AsO<sub>4</sub>(aq)  $\longrightarrow$   $\frac{1}{2}$  As<sub>2</sub>O<sub>5</sub>(aq) +  $\frac{3}{2}$  H<sub>2</sub>O(l)

$$P_4(s) + SO_2(g) \longrightarrow P_2O_5$$

$$\frac{\mathcal{U}}{\mathcal{V}} \operatorname{FeS}_{2}(s) + \underline{\mathcal{V}} \operatorname{O}_{2}(g) \longrightarrow \underline{\mathcal{Z}} \operatorname{Fe}_{2} \operatorname{O}_{3}(s) + \underline{\mathscr{C}} \operatorname{SO}_{2}(g)$$

$$L_3H_8(g) + 5O_2(g) \longrightarrow 3CO_2(g) + 4H_2O(g)$$

$$2C_3H_8(g) + 7O_2(g) \longrightarrow 6CO(g) + 8H_2O(g)$$

$$2 \text{Na}_2\text{O}_2(s) + 2 \text{H}_2\text{O}(l) \longrightarrow \text{NaOH}(aq) + \text{O}_2(g)$$

$$I$$
Zn(s) +  $I$ HCl(aq)  $\longrightarrow$   $I$ ZnCl<sub>2</sub>(aq) +  $I$ H<sub>2</sub>(g)