Answer Key for Balancing Equations

1. ${ }_{\text {OR }}^{\mathrm{H}_{2(G)}+\frac{1}{2} \mathrm{O}_{2(G)} \longrightarrow \mathrm{H}_{2(s)}} \mathrm{H}_{2(l)} 2_{\mathrm{H}_{2} \mathrm{O}_{(0)}}$
2. $2_{K N O_{2(\varphi)}}+o_{2(\omega)} \longrightarrow 2_{K N O_{3 \omega}}$ OR $\mathrm{KNO}_{2(s)}+\frac{1}{2} \mathrm{O}_{2}(0) \longrightarrow \mathrm{KNO}_{3}$
3. $2_{c_{2} O_{(\omega)}} \longrightarrow 4_{c_{\omega}}+{ }^{3} o_{2 \omega}$
4. $-\quad n_{(6)}+2_{H C_{(E Q)}} \longrightarrow \quad Z_{n C} C_{2(t)}+\longrightarrow H_{2 \omega}$
5. $4_{\mathrm{NH}_{3()}}+5 \mathrm{o}_{2(6)} \longrightarrow 6 \mathrm{H}_{2} \mathrm{O}_{(6)}+4_{\mathrm{NO}_{(6)}}$

OR $2 \mathrm{NH}_{3}(9)+\frac{5}{2} \mathrm{O}_{2}(\theta) \longrightarrow 3 \mathrm{H}_{2}(9)+2 \mathrm{NO}_{(9)}$
6. $3_{M g_{\varphi)}}+\mathrm{N}_{2(\varphi)} \longrightarrow \mathrm{Mg}_{3} \mathrm{~N}_{2 \omega}$
7. $2_{F e_{G G}}+3 C_{2(G)} \longrightarrow 2_{\mathrm{FeCl}_{3 G}}$
8. $-c_{3} H_{(G)}+5_{o_{2 G}} \longrightarrow 4_{H_{2} O_{6)}}+3 C O_{2()}$
9. $-C_{2} \mathrm{H}_{3} \mathrm{OH}_{(6)}+3_{\mathrm{O}_{26}} \longrightarrow 3_{\mathrm{H}_{2} \mathrm{O}_{66}}+2 \mathrm{CO}_{26)}$

11. $2 c_{0} H_{149(9)}+19 o_{2(6)} \longrightarrow 14 H_{H_{2}} O_{(0)}+12 C O_{26)}$
ar $\left.\mathrm{C}_{6} \mathrm{H}_{14}(\mathrm{e})+\frac{19}{2} \mathrm{O}_{2} \mathrm{O}\right) \rightarrow 7 \mathrm{H}_{2} \mathrm{OL}()+6 \mathrm{O}_{2(9)}$
12. $2 \mathrm{CH}_{3} \mathrm{OH}_{(0)}+3 \mathrm{O}_{2(6)} \longrightarrow 4 \mathrm{H}_{2} \mathrm{O}_{(6)}+2 \mathrm{CO}_{2()}$
ar $\mathrm{CH}_{3} \mathrm{OH}(\mathrm{e})+\frac{3}{2} \mathrm{O}_{2}(3) \longrightarrow 2 \mathrm{H}_{2} \mathrm{O}(\mathrm{e})+\mathrm{CO}_{2(3)}$
13. $\longrightarrow \mathrm{HBrO}_{3(0}+5_{\mathrm{HBr}_{60}}^{\longrightarrow} 3_{\mathrm{H}_{2} \mathrm{O}_{60}}+3_{\mathrm{Br}_{20}}$
14. $\mathrm{Fe}_{3} \mathrm{O}_{4(5)}+4 \mathrm{H}_{2(6)} \longrightarrow 3 \mathrm{Fe}_{(6)}+4 \mathrm{H}_{2} \mathrm{O}_{()}$
15. $4_{\mathrm{Fe}(\mathrm{OH})_{2(G)}}+\frac{-}{-} \mathrm{o}_{2(6)}+2_{\mathrm{H}_{2} \mathrm{O}_{60}} \longrightarrow 4_{\mathrm{Fe}(\mathrm{OH})_{s G}}$ or $\left.2 \mathrm{Fe}(\mathrm{OH})_{2(\mathrm{~s})}+\frac{1}{2} \mathrm{O}_{2} \mathrm{O}\right)+\mathrm{H}_{2} \mathrm{OH} \longrightarrow 2 \mathrm{Fe}(\mathrm{OH})_{x(s)}$



19. $-\mathrm{Ca}\left(\mathrm{NO}_{3}\right)_{2(a)}+2 \mathrm{NaF}_{\text {equ }} \longrightarrow-\mathrm{CaF}_{2(\omega)}+2 \mathrm{NaNO}_{3(a)}$
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