Complete the following reactions. Circle the most favored products.

3.
$$+ 2 \text{ Ag}^+_{(aq)} + \text{NH}_{3(aq)} \xrightarrow{[0]}$$

4.
$$+ 2 Cu^{+2}_{(aq)} + NaOH$$

9.
$$\stackrel{\bigcirc}{\downarrow}$$
 + $\stackrel{\bigcirc}{\downarrow}$ $\stackrel{[H^+]}{\longleftarrow}$

10.
$$+ 2 Cu^{+2}_{(aq)} + NaOH$$

11.
$$\qquad \qquad \stackrel{\bullet}{\longrightarrow} \qquad \stackrel{\text{H}_2/\text{Ni}}{\longrightarrow} \qquad \qquad$$

13.
$$\begin{array}{c} \bullet \\ \hline \Delta \end{array}$$

14.
$$\longrightarrow \frac{H_2/Ni}{\Delta}$$

17.
$$\bigcirc$$
 + HCN \bigcirc [OH]

18.
$$\rightarrow$$
 \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow

19.
$$\stackrel{\mathsf{O}}{\longleftarrow}$$
 + HCN $\stackrel{\mathsf{[OH]}}{\longrightarrow}$

20.
$$+ 2 \text{ Ag}^+_{(aq)} + \text{NH}_{3(aq)}$$
 [0]

21.
$$\bigcirc$$
OH + \bigcirc OH $\underline{[H_2O]}$

CHE102 - Extra Practice E2 - S18 - Ver. 3

Question 1: $_{co_2}(g) + _{h_2}(g) + _{h$

Question 2: $+Cu_2O_{(s)} + H_2O$ Visible Change: clear blue \longrightarrow brick-red ppt

Question 3: $+2 \text{ Ag}_{(s)}$ Visible Change: clear \longrightarrow Silver Mirror

Question 5: $+ H_2O$

Question 6: $+ H_2O$

Question 7:

Question 8: \downarrow \downarrow \downarrow

Question 9: OH

Question 10: $+Cu_2O_{(s)} + H_2O$ Visible Change: clear blue \longrightarrow brick-red

ppt

Question 11:

Question 12: $+ H_2O$ Rate: Fast

Question 13:

Question 14:

CHE102 - Extra Practice - E2 - Exam 2 (Alc/Eth/Ald/Ket) - S18 - Ver. 3

Question 15: $+ H_2O$ Rate: Very Slow

Question 17: OH

Question 18:

Question 19:

Question 20: — \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow Silver Mirror

Question 21: $+ H_2O$

Question 22: $_{co_2}(g) + _{h_2}(g) + _{h_2}(g) + _{h_2}(g)$ Balance: (1,10,7,7)

Question 23: OH