Complete the following reactions. Circle the most favored products.

2.
$$\downarrow$$
 OH + \downarrow OH \downarrow [:H₂O]

$$3.$$
 \leftarrow $+$ Cl_2 \longrightarrow

$$6.$$
 \longrightarrow + NaOH \longrightarrow

$$^{7.} \geqslant ^{+} H_{2}(g) \longrightarrow$$

$$9.$$
 \leftarrow + HCI \longrightarrow

10.
$$H_2/Ni$$

$$^{15.}$$
 $^+$ Cl_2 \longrightarrow

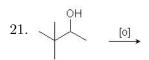
16. OH +
$$\bigcap_{OH}$$
 $\underbrace{[:H_2O]}$

17.
$$\uparrow^{0}$$
 + HCI + H₂O \rightarrow

18.
$$\stackrel{\mathsf{OH}}{\longleftarrow}$$
 $\stackrel{[0]}{\longrightarrow}$

19.
$$+ H_2O$$
 [H+]

20. OH + OH
$$[-H_2O]$$



23.
$$\bigcirc$$
OH + \bigcirc OH $[-H_2O]$

24.
$$\xrightarrow{\circ} \xrightarrow{H_2/\text{Ni}} \xrightarrow{\Delta}$$

Question 1:
$$+ HCI \rightarrow \qquad \qquad + H_2O$$

Question 2: $+ CI_2 \rightarrow \qquad HCI + CI$

Question 3: $+ CI_2 \rightarrow \qquad HCI + CI$

Question 4: $+ CI_2 \rightarrow \qquad HCI + CI$

Question 5: $+ CI_2 \rightarrow \qquad HCI + CI$

Question 6: $+ CI_2 \rightarrow \qquad HCI \rightarrow \qquad CI$

Question 7: $+ CI_2 \rightarrow \qquad CI$

Question 8: $+ CI_2 \rightarrow \qquad CI$

Question 9: $+ CI_2 \rightarrow \qquad CI$

Question 9: $+ CI_2 \rightarrow \qquad CI$

Question 9: $+ CI_2 \rightarrow \qquad CI$

Question 10: $+ CI_2 \rightarrow \qquad CI$

Question 15:
$$\leftarrow$$
 + Cl_2 \rightarrow \leftarrow

Question 16:
$$\bigcirc$$
OH + \bigcirc OH \bigcirc H₂OI \bigcirc H₂OI \bigcirc H₂OI \bigcirc

Question 18:
$$OH \longrightarrow OH \longrightarrow H_2O$$

Question 19:
$$\longrightarrow$$
 + H_2O [H*] \longrightarrow OH + \bigcirc OH

Question 22:
$$(0)$$
 (0) (1) (1) (2)

Question 23:
$$\bigcirc$$
OH + \bigcirc OH \bigcirc H₂O

