Complete the following reactions. Circle the most favored products.

1. 
$$+ \text{ KMnO}_4 + \text{H}_2\text{O} \rightarrow$$

$$2. \bigcirc \qquad + \bigcirc \qquad \bigcirc \qquad \longrightarrow$$

$$^{4.}$$
  $^{+}$  KMnO<sub>4</sub> + H<sub>2</sub>O  $\longrightarrow$ 

$$6.$$
  $\bigcirc$  + HCl  $\rightarrow$ 

7. 
$$+ \text{KMnO}_4 + \text{H}_2\text{O} \rightarrow$$

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

$$10.$$
  $\bigcirc$  +  $\mathrm{Cl_2}$   $\longrightarrow$ 

11. 
$$\leftarrow$$
 +  $\operatorname{Cl}_2$   $\rightarrow$ 

13. 
$$+ H_2(g) \rightarrow$$

14. 
$$+ \text{ KMnO}_4 + \text{H}_2\text{O} \rightarrow$$

16. 
$$\rightarrow$$
 +  $\text{Cl}_2$   $\rightarrow$ 

17. 
$$+ H_2O \rightarrow$$

18. 
$$+ H_2O \rightarrow$$

19. 
$$\leftarrow$$
  $+$   $\text{Cl}_2$   $\rightarrow$ 

20. 
$$+ \text{ KMnO}_4 + \text{H}_2\text{O} \rightarrow$$

21. 
$$+ \text{KMnO}_4 + \text{H}_2\text{O} \rightarrow$$

$$22.$$
 +  $Cl_2$  -

23. 
$$+ H_2O \rightarrow$$

$$24.$$
 + HCl  $\rightarrow$ 

25. 
$$+ H_2O \rightarrow$$

Question 1: 
$$OH + MnO_2 + KOH$$
Question 2:  $OH + HCI$ 

Question 3: 
$$CI$$

Question 4: 
$$+ \text{MnO}_2$$
 + KOH

Question 5: 
$$\bigcirc$$
 OH +HO =0

Question 7: 
$$+ \text{MnO}_2$$
 + KOH

Question 14: 
$$+ \text{MnO}_2$$
 + KOH

Question 20: 
$$+ \text{MnO}_2$$
 + KOH

Question 21: 
$$+ \text{MnO}_2$$
 + KOH