UNIT 5B PRACTICE QUIZ 1 – OXIDATION AND REDUCTION

Consider the following reactions and use them to answer Questions 1 – 7:

Reaction V	**$2Na + Cl_2 \rightarrow 2NaCl$**
Reaction W	**$H_2 + Br_2 \rightarrow 2HBr$**
Reaction X	**$Mg + 2HCl \rightarrow MgCl_2 + H_2$**
Reaction Y	**$CaO + 2HCl \rightarrow CaCl_2 + H_2O$**
Reaction Z	**$Mg + CuO \rightarrow MgO + Cu$**

1.	In Reaction W, what is the charge on H in H_2?
2.	In Reaction W, what is the charge on H in HBr?
3.	In Reaction Y, what is the charge of the Ca in $CaCl_2$ and CaO? Note: Ca is the same charge in both compounds
4.	In Reaction X, what is oxidized and what is reduced?
5.	What is the oxidizing agent in Reaction V?
6.	What is the reducing agent in Reaction Z?
7.	Which of the above reactions is not a redox reaction?

8.	Which of the following is a correct oxidation half-equation?	
	A	$Zn^{2+} + 2e^- \rightarrow Zn$
	B	$Zn \rightarrow Zn^{2+} + 2e^-$
	C	$Zn^{2+} \rightarrow Zn + 2e^-$
	D	$Zn + 2e^- \rightarrow Zn^{2+}$

9.	Which of the following is a correct reduction half-equation?	
	A	$Zn^{2+} + 2e^- \rightarrow Zn$
	B	$Zn \rightarrow Zn^{2+} + 2e^-$
	C	$Zn^{2+} \rightarrow Zn + 2e^-$
	D	$Zn + 2e^- \rightarrow Zn^{2+}$

10.	Consider the following redox reaction: $Cu + 2Fe^{3+} \rightarrow Cu^{2+} + 2Fe^{2+}$ Which of the following is the reduction half-equation for this reaction?	
	A	$Cu \rightarrow Cu^{2+} + 2e^-$
	B	$Cu + 2e^- \rightarrow Cu^{2+}$
	C	$Fe^{3+} + e^- \rightarrow Fe^{2+}$
	D	$Fe^{3+} \rightarrow Fe^{2+} + e^-$
	E	$Cu \rightarrow Cu^{2+} + e^-$

Here is the link to the answer sheet