

UNIT 5B FOUNDATION PRACTICE QUIZ 1 – OXIDATION AND REDUCTION

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

Reaction W	$\text{H}_2 + \text{Br}_2 \rightarrow 2\text{HBr}$
Reaction X	$\text{Mg} + 2\text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2$
Reaction Y	$\text{CaO} + 2\text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O}$
Reaction Z	$\text{Mg} + \text{CuO} \rightarrow \text{MgO} + \text{Cu}$

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 ?
4.	In Reaction X, what is oxidized?
5.	In Reaction X, what is reduced?
6.	What is the reducing agent in Reaction Z?

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

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

[Here is the link to the answer sheet](#)