

Chemistry Worksheet Grade X Chemical Reactions and Equations

1. What happens chemically when quick lime is added to water?
2. Name and state the law which is kept in mind while we balanced a chemical reaction.
3. How will you test for the gas which is liberated when HCL reacts with an active metal?
4. What is an oxidation reaction? Is it exothermic or endothermic? Give one example of oxidation reaction.
5. a. Define corrosion.
b. What is corrosion of iron called?
c. How will you recognise the corrosion of silver?
d. Why corrosion of iron is a serious problem?
e. How can we prevent corrosion?
6. List four observations that help us to determine whether a chemical reaction has taken place.
7. Give an example of photochemical reaction.
8. Give an example of a decomposition reaction. Describe any activity to illustrate such a reaction by heating.
9. Write the chemical equation of the reaction with an example each in which the following changes have taken place:
 - a. Change in colour
 - b. Change in temperature
 - c. Formation of precipitate
10. Why is respiration considered as exothermic process?
11. Balance the following chemical equation.
 - a. $\text{Fe(s)} + \text{H}_2\text{O(g)} = \text{Fe}_3\text{O}_4 + \text{H}_2\text{(g)}$
 - b. $\text{MnO}_2 + \text{HCL} = \text{MnCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$
 - c. $\text{HNO}_3 + \text{Ca(OH)}_2 = \text{Ca(NO}_3)_2 + \text{H}_2\text{O}$
12. On what basis is a chemical equation balanced?
13. State any two observations in an activity suggesting the occurrence of a chemical reaction.
14. Name a reducing agent which may be used to obtain manganese from manganese dioxide.
15. What change in colour is observed when silver chloride is left exposed to sunlight? Also mention the type of chemical reaction.
16. Define a combination reaction. Give one example of an exothermic combination reaction.
17. What is observed when a solution of potassium iodide is added to lead nitrate solution?
18. What type of reaction is this? Write a balanced chemical equation for this reaction.
19. Distinguish between an exothermic and an endothermic reaction.
20. Distinguish between a displacement and a double displacement reaction.
21. Identify the type of reaction in the following:
 - a. $\text{Fe} + \text{CuSO}_4\text{(aq)} \rightarrow \text{FeSO}_4\text{(aq)} + \text{Cu(s)}$
 - b. $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$