

Worksheet: Chemical Reactions and Equations

1. Why are decomposition reactions called the opposite of combination reactions? Write equations for these reactions
2. Oil and fat containing food items are flushed with nitrogen. Why?
3. A solution of substance 'X' is used for white washing. What is the substance 'X'? State the chemical reaction of 'X' with water.
4. What do you mean by a precipitation reaction? Explain by giving examples.
5. In the refining of silver, the recovery of silver from silver nitrate solution involved displacement by copper metal. Write down the reaction involved.
6. Why is respiration considered an exothermic reaction? Explain
7. A shiny brown coloured element 'X' on heating in air becomes black in colour. Name the element 'X' and the black coloured compound formed.
8. What does one mean by exothermic and endothermic reactions? Give examples.
9. Why should a magnesium ribbon be cleaned before burning in air?
10. What is a balanced chemical equation? Why should chemical equations be balanced?
11. Hydrogen being a highly inflammable gas and oxygen being a supporter of combustion, yet water which is a compound made up of hydrogen and oxygen is used to extinguish fire. Why?
12. What is meant by a chemical reaction?
13. Why does the colour of copper sulphate solution change when an iron nail is dipped in it?
14. 1 g of copper powder was taken in a China dish and heated. What change takes place on heating? When hydrogen gas is passed over this heated substance, a visible change is seen in it. Give the chemical equations of reactions, the name and the colour of the products formed in each case.
15. Write one equation each for decomposition reactions where energy is supplied in the form of heat, light or electricity.
16. What is the difference between displacement and double displacement reactions? Write equations for these reactions.