

Chemistry Worksheet Class X
Metals and Non-Metals

Very Short Answer Questions

1. Give exceptions for the following
 - a) All metals exist as solids at room temperature.
 - b) Non-metals are non-lustrous.
 - c) Non-metals do not conduct electricity.
 - d) Metals are hard.
 - e) Solid non-metals are hard.
 - f) Metals are solid at room temperature.
 - g) Metals have high melting and boiling point.
2. What is amalgam?
3. Why do metals like gold occur free in nature?
4. What is gangue?
5. What is aqua regia?
6. Which are the allotropes of carbon?

Short Answer Questions

1. List the physical properties of the metals
2. With the help of equation, show that Al_2O_3 is an amphoteric oxide
3. Why there is no evolution of hydrogen when nitric acid reacts with metals
4. What is electrovalent bond. Show the formation of NaCl , Na_2O , MgO , MgCl_2 with the help of electron- dot representation
5. Write the properties of ionic compounds
6. What is an alloy? Write the composition of brass, bronze and solder
7. What is the reactivity series of metals?
8. How are the metals of the high reactivity extracted from its ores?
9. What do you mean by roasting and calcination? Give examples.
10. Write short note on
 - a. anodising
 - b. galvanisation
 - c. electrolytic refining
 - d. thermit process

11. Why do metals like sodium and potassium is stored under kerosene
12. Why do ionic compounds have high melting point?
13. Why do the metals with reactivity cannot be extracted by reduction of oxides?
14. How do silver, copper and iron corrode when exposed to the atmosphere
15. Write balanced chemical reaction for-
 - a. Iron with steam
 - b. Calcium and potassium with water
 - c. Steam passed over red hot steam
 - d. Zinc sulphide heated in air
 - e. cinnabar heated in air
 - f. manganese dioxide is heated with aluminium oxide powder
 - g. How is copper obtained from copper sulphide, Write equation.

LONG ANSWER QUESTIONS

1. Explain the reaction of various metals with oxygen with suitable equations
2. Why is aluminium oxide called as an amphoteric oxide?
3. Metallic oxides are generally basic in nature while non-metallic oxides are acidic in nature. Illustrate with suitable examples.
4. Explain the reaction of various metals with acids with suitable equations.
5. With a neat labeled diagram, explain the process of electrolytic refining of copper
6. Write an activity to prove that moisture and oxygen is necessary to form rust.
7. What are the ways to prevent corrosion of iron?
8. How are the metals middle in the reactivity series extracted from its ores?