

CBSE Class 12 Chemistry Chapter 6 General Principles and Processes of Isolation of Elements Worksheet – Set 1

Q1. Common impurities present in bauxite are-

- a.) CuO
- b.) ZnO
- c.) Fe₂O₃
- d.) SiO₂

Q2. Which of the following is not an ore of magnesium?

- a.) Gypsum
- b.) Dolomite
- c.) Magnesite
- d.) Carnallite

Q3. The metal which is always found in the free state is-

- a.) Gold
- b.) Silver
- c.) Copper
- d.) Sodium

Q4. Roasting results in the production of metal in the case of-

- a.) Iron pyrite
- b.) Cinnabar
- c.) Galena
- d.) Bauxite

Q5. Zone refining has been employed for preparing ultra-pure samples of-

- a.) Cu
- b.) Na
- c.) Ge
- d.) Zn

Q6. What is gangue?

Q7. Define metallurgy.

- Q8.** Why do metal sulphides occur mainly in rocks and metal halides occur mostly in lakes and seas?
- Q9.** What are the major steps of extraction and isolation of metals?
- Q10.** What do you understand by Hall–Heroult process?
- Q11.** Name two examples of the following ores:
- Oxides
 - Sulphides
 - Carbonates
 - Silicates
- Q12.** Differentiate between Roasting and Calcination.
- Q13.** Why is the reduction of a metal oxide easier if the metal is formed in the liquid state at the temperature of reduction?
- Q14.** The value of $\Delta_f G^\circ$ for the formation of Cr_2O_3 is -540 kJ mol^{-1} and that of Al_2O_3 is -827 kJ mol^{-1} . Is the reduction of Cr_2O_3 possible with Al?
- Q15.** Write down the reactions taking place in different zones in the blast furnace during the extraction of iron.
- Q16.** Explain the Ellingham diagram?
- Q17.** Explain the electrochemical principle of metallurgy?
- Q18.** Explain the significance of the leaching in the extraction of aluminium?
- Q19.** Give the extraction process of iron.
- Q20.** Give uses of aluminium, copper, zinc and iron.