

Chapter: 5.2 (The reactivity series)

1. Copy and complete the following sentences.

Nickel is between **iron** and **tin** in the middle of the reactivity series. A **more** reactive metal can displace a **less** reactive metal from its **compound**. The most stable metal compounds are formed from the **most** reactive metals.

2. Define the following:

i) **Reactivity series:** A list of metals arranged in order of their reactivity from high to low is called reactivity series.

ii) **Decomposition reaction:** A reaction in which a compound breaks down into simpler substance is called decomposition reaction.

Eg. Copper carbonate \rightarrow Copper oxide + Carbon dioxide.

iii) **Displacement reaction:** A reaction in which a highly reactive metal displaces a less reactive metal from its compound is called displacement reaction.

Eg. Zinc + Copper oxide \rightarrow Zinc oxide + Copper.

3. Copy and complete the following reaction equations. Write 'no reaction' if nothing happens.

a) Iron + Lead oxide \rightarrow Lead + Iron oxide.

b) Zinc + Nickel sulphate \rightarrow Zinc sulphate + Nickel.

c) Mercury + Lead Chloride \rightarrow 'No reaction'.

d) Magnesium + Copper nitrate \rightarrow Magnesium nitrate + Copper.

e) Tin + Silver nitrate \rightarrow Tin nitrate + Silver.

f) Iron + Zinc Phosphate \rightarrow 'No reaction'.

g) Copper oxide + Zinc \rightarrow Zinc oxide + Copper.

4. Write the reactivity series.....

Police Sergeant Charlie MAZINTL Caught Me Stealing Gold Plate.

1. **P**= Potassium, 2. **S**= Sodium, 3. **C**= Calcium, 4. **M**= Magnesium,
5. **A**= Aluminium, 6. **Z**= Zinc, 7. **I**= Iron, 8. **N**= Nickel, 9. **T**= Tin,
10. **L**= Lead, 11. **C**= Copper, 12. **M** = Mercury 13. **S**= Silver,
14. **G** = Gold, 15. **P** = Platinum.

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