

Long Answer Questions

Q. 1. Some of the following statements are incorrect. Find the incorrect statements and correct them. [NCERT Exemplar]

- a. The property of metals by virtue of which they can be drawn into wires is called ductility.
- b. Metals are good conductors of electricity but poor conductors of heat.
- c. Articles made of metals produce ringing sound when struck hard.
- d. Oxides of non-metals and metals are acidic in nature.
- e. A less reactive metal replaces a more reactive metal from its salt solution in water.

Ans. Statements (b), (d) and (e) are not correct.

- (b) Metals are good conductors of electricity and also good conductors of heat.
- (d) Oxides of non-metals are acidic in nature and oxides of metals are basic in nature.
- (e) A more reactive metal replaces a less reactive metal from its salt solution in water.

Q. 2. Iron is more reactive than copper. Can you write an activity to show this? [NCERT Exemplar]

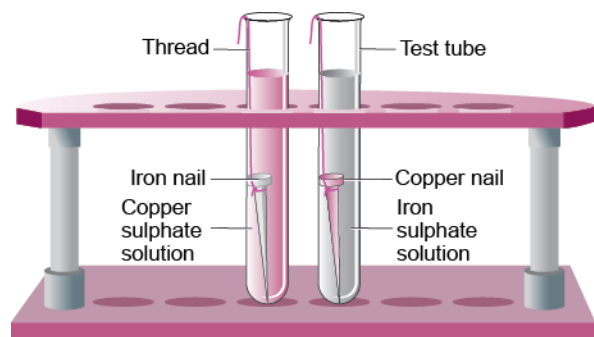
Ans. Set up the two test tubes as shown in the figure.

Take a clean copper nail and an iron nail.

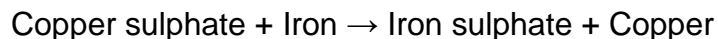
Place the copper wire in a solution of iron sulphate and the iron nail in a solution of copper sulphate.

Write your observations after sometime.

In which test tube do you find that a reaction has occurred?



You will observe that the reaction has occurred in the test tube containing iron nail and copper sulphate solution. Iron takes the sulphate away from copper. You see that a reaction takes place and copper is left by itself. Now, we can say that iron has displaced copper from copper sulphate.



In such a reaction, the more reactive metal displaces the less reactive metal. Thus, the above activity shows that iron is more reactive than copper.

Q. 3. Fill in the blanks to complete the following paragraph.

The name of the product formed in the reaction of sulphur and _____ is sulphur dioxide gas. When sulphur dioxide is dissolved in _____, sulphurous acid is formed. The sulphurous acid turns _____ litmus paper to _____. Generally oxides of _____ are acidic in nature. After completing the paragraph write two questions which you can raise on the basis of this information.

Ans. Oxygen, water, blue, red, non-metals. Questions may be

- a. Which gas is formed when sulphur reacts with oxygen?
- b. What is the nature of oxides of non-metals?