

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Materials: Metals and Non-Metals

Q1. What happens when iron nails are placed in copper sulphate solution?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q2. Why a greenish deposit is found on copper vessels in rainy season?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q3. What happens when dilute sulphuric acid is poured on a copper plate?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q4. State some of the chemical properties of non-metals.

Ans. \_\_\_\_\_  
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## Materials: Metals and Non-Metals

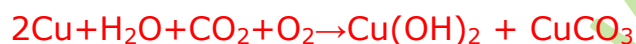
Q1. What happens when iron nails are placed in copper sulphate solution?

Ans. Iron being more reactive displaces copper from copper sulphate. In this reaction, the blue color of copper sulphate fades and there is deposition of copper on the iron nail.



Q2. Why a greenish deposit is found on copper vessels in rainy season?

Ans. When a copper vessel is exposed to moist air for long, it acquires a dull green coating. The green material is a mixture of copper hydroxide ( $\text{Cu(OH)}_2$ ) and copper carbonate ( $\text{CuCO}_3$ ). The following is the reaction



Q3. What happens when dilute sulphuric acid is poured on a copper plate?

Ans. Metals react with acids and produce hydrogen gas that burns with a 'pop' sound. Copper is below hydrogen in reactivity series. Thus, copper does not react with dilute sulphuric acid but it reacts with sulphuric acid on heating. Hence, no reaction will take place when dilute sulphuric acid is poured on a copper plate.

Q4. State some of the chemical properties of non-metals.

Ans. Chemical properties of non-metals

- i. Non-metals react with oxygen to produce non-metallic oxides which are acidic in nature.
- ii. Generally, non-metals do not react with water.
- iii. Generally, non-metals do not react with acids.