



## CLASS NOTES-ANSWERS

1) Which of the following can be beaten into thin sheets?

- a) Zinc
- b) Phosphorus
- c) Sulphur
- d) Oxygen

Answer: Zinc

2) Which of the following statements is correct?

- (a) All metals are ductile.
- (b) All non-metals are ductile.
- (c) Generally, metals are ductile.
- (d) Some non-metals are ductile.

Answer: Generally, metals are ductile

3) Fill in the blanks.

- a) Phosphorus is a very reactive non-metal.
- b) Metals are good conductors of heat and electricity.
- c) Iron is more reactive than copper.
- d) Metals react with acids to produce hydrogen gas.

4) Mark 'T' if the statement is true and 'F' if it is false.

- a) Generally, non-metals react with acids. F
- b) Sodium is a very reactive metal. T
- c) Copper displaces zinc from zinc sulphate solution. F
- d) Coal can be drawn into wires. F

5) Some properties are listed in the following Table. Distinguish between metals and non-metals on the basis of these properties.

Answer:



Properties	Metals	Non-metals
1. Appearance	Have metallic luster	Dull
2. Hardness	Hard	Soft
3. Malleability	Malleable	Non-malleable
4. Ductility	Ductile	Non-ductile
5. Heat conduction	Good conductors	Bad conductors
6. Conduction of electricity	Good conductors	Bad conductors

6) Give reasons for the following.

a) Aluminium foils are used to wrap food items.

**Answer:** Aluminium is highly malleable and it can be easily beaten into thin sheets to make its foil for wrapping purposes. It is also soft and does not react with food items. That is why aluminium foils are used to wrap food items.

b) Immersion rods for heating liquids are made up of metallic substances.

**Answer:** Immersion rods made up of metallic substances because metals are good conductors of heat and electricity. They get hot very soon on the passage of electric current and warm the water.

c) Copper cannot displace zinc from its salt solution.

**Answer:** Copper is less reactive than zinc so, it cannot displace zinc from its solution.

d) Sodium and potassium are stored in kerosene.

**Answer:** Sodium and potassium are highly reactive, so they are



stored in kerosene.

7) Can you store the lemon pickle in an aluminium utensil? Explain.

**Answer:** No, we cannot store lemon pickle in an aluminium utensil because aluminium is a metal and metals readily react with acids to produce hydrogen. When aluminium comes in contact with lemon, which is acidic, would react to give hydrogen and the pickles will be spoiled.

8) Match the substances given in column A with their uses given in column B.

A	B
i) Gold	a) Thermometers
ii) Iron	b) Electric wire
iii) Aluminium	c) Wrapping food
iv) Carbon	d) Jewellery
v) Copper	e) Machinery
vi) Mercury	f) Fuel

**Answer:**

A	B
i) Gold	d) Jewellery
ii) Iron	e) Machinery
iii) Aluminium	c) Wrapping food
iv) Carbon	f) Fuel
g) Copper	b) Electric wire
h) Mercury	a) Thermometers



9) What happens when,

(a) Dilute sulphuric acid is poured on a copper plate?

(b) Iron nails are placed in a copper sulphate solution?

Write word equations of the reactions involved.

**Answer:**

(a) No reaction will take place because copper is very less reactive.

(b) Iron being more reactive than copper will replace copper from its solution and brown coating of copper is deposited on the iron nails.

Also, the blue colour turns green.

Iron + Copper sulphate (solution) → Iron sulphate (solution) + Copper

10) Saloni took a piece of burning charcoal and collected the gas evolved in a test tube.

(a) How will she find the nature of the gas?

**Answer:** She can find the nature of the gas by using a wet litmus paper.

After bringing the litmus paper in contact with the gas, if it turns the blue litmus paper into red, it is acidic. Similarly, if it turn the red litmus into blue, it is basic.

(b) Write down the word equations of all the reactions taking place in this process.

**Answer:**

(i) Carbon + Oxygen → Carbon dioxide (Reaction of non-metal with oxygen produces non-metallic oxide)

(ii) Carbon dioxide + Water → Carbonic acid (Reaction of non-metallic oxide with water produces an acid)



11) One day Reeta went to a jeweller's shop with her mother. Her mother gave an old gold jewellery to the goldsmith to polish. Next day when they brought the jewellery back, they found that there was a slight loss in its weight. Can you suggest a reason for the loss in weight?

**Answer:** The gold jewellery is dipped into an acidic solution called aqua regia (a mixture of hydrochloric acid and nitric acid) for polishing. On dipping the gold jewellery in the acid solution, the outer layer of gold dissolves and the inner shiny layer appears. This causes a slight loss in its weight.

