

Chemistry – college flashcard



**ASSIGN
BUSTER**

Write the balanced chemical equation for the following reaction and identify the type of reaction and define it.

' Iron III oxide reacts with Aluminum and gives molten Iron and aluminum oxide'. 2. Name the following : (a) A metal which is preserved In kerosene (b) A lustrous colored non metal (c) A metal which can melt while kept on palm. (d) A metal, which Is a poor conductor of heat. 3. A reddish brown colored metal, used In electrical wires, when powdered and heated strongly in an open china dish, its color turns black.

When hydrogen gas is passed over this black substance, it regains its original color. Based on the above information answer the following questions. (I) Name the metal and the black colored substance formed. (II) Write balanced chemical equations for both the reactions. 4. (a) Give an example for a combination reaction which is exothermic.

(b) Identify the oxidations agent, reducing agent in the following reaction. $\text{H}_2\text{O} + \text{CO} \rightarrow \text{H}_2 + \text{CO}_2$ (c) Name the phenomenon due to which the taste and smell of oily food changes when kept for a long time in open. Suggest one method to prevent it. 5. A) Write the name given to bases that are highly soluble in water ? Give an example. (b) How is tooth decay related to pH ? How can it be prevented ? (c) Why does bee sting cause pain and irritation ? Rubbing of baking soda on the sting area gives relief.

How ? 6. (a) Why is calcium starts floating when added to water ? (b) Most of the metals do not give hydrogen while reacting with nitric acid. Why ? (c) Write equation for the reaction of Iron with steam. Name the compound of

Iron obtained. 7. A) In the formation of compound between two atoms A and B, A loses two electrons and B gains one electron.

L) What is the nature of bond between A and B? (II) Suggest the formula of the compound formed between A and B. (b) On salary lines explain the formation of MgO molecule. (c) Common salt conducts electricity only in the molten state. Why? (d) Why is melting point of NaCl high? 8. (a) Carbon cannot be used as reducing agent to obtain Mg from MgO. Why? (b) reactions.

(c) How is copper obtained from its sulfide ore? Give equations of the reactions. 9. A) Identify the acid and the base whose combination forms the common salt that you use in your food. Write its formula and chemical name of this salt.

Name the source from where it is obtained.

(b) What is rock salt? Mention its color and the reason due to which it has this color. (c) What happens when electricity is passed through brine? Write the chemical equation for it. 10. (a) Write the chemical name and chemical formula of washing soda.

(b) How is it obtained from sodium chloride? Give equations of the reactions.

(c) Why is it called a basic salt? Give its any one use. 11. When ferrous sulfate crystals are heated, the color of the residue formed is : (a) red (b) brown (c) orange (d) green 12.

A small amount of quick lime is taken in a beaker.

Water is added slowly to the beaker. Which of the following observations were noted ? (a) Hissing sound and the solution becomes hot (b) No characteristic sound and solution turns cold (c) Hissing sound and the solution becomes cold. (d) No characteristic sound and the solution becomes hot. 13. The color of pH strip turned red when it was dipped in a sample.

The sample could be : (a) dilute NaOH solution (b) tap water (c) dilute HCl solution (d) dilute NaCl solution 14. The correct method of finding pH of solution is to : (a) heat the solution in the test tube and expose the pH paper to the vapors formed. (b) pour solution from the test tube on pH paper (c) drop the pH paper into the solution (d) add a drop of solution on the pH paper using a dropper. 15. 10 ml of HCl and 10 ml of NaOH solutions are taken in two separate beakers labeled I and II respectively. On adding Zinc granules to both, it is observed that at room temperature (a) Gas is evolved vigorously in both (b) Gas is evolved vigorously in beaker I and not in the beaker II (c) Gas is evolved vigorously in beaker II but not in the beaker I (d) No gas is evolved in either of the two beakers 16.

A new iron nail is placed in a beaker containing aqueous copper sulfate solution. When the nail is taken out after 15 minutes, its surface is coated with (a) black deposit (b) white deposit (c) black deposit (d) white deposit 17. A piece of granulated Zn was dropped into copper sulfate solution. After some time the color of solution changed from (a) light green to blue (b) blue to colorless (c) light green to colorless (d) blue to green