

(Students are suggested to do this worksheet in class work copies by themselves with the help of the You Tube Audio-Visual Explanations and pdf In-text Notes provided On-Line related to this chapter)

1. Name one

- a) Non metal which can conduct electric current.
- b) Metal that is liquid at room temperature.
- c) Metal which can be cut through a knife.
- d) Metal which can be burn to get colourful flame.
- e) Metal which catches fire itself when kept exposed to air

2. A student of class VII was going to pour some dilute sulphuric acid in an iron made container. You as a senior advised her not to keep the acid in the iron container or any other metallic container; instead she should keep it in a plastic container or glass container. You also explained the chemical reason behind it with chemical reaction to her. Write that chemical reason and chemical reaction with reference to iron and dilute sulphuric acid as a record in the Laboratory register as further precautionary measure for other students.

3. You are showing a chemical magic in a School Science Fair. You dropped some pieces of iron nails in a blue coloured solution which after sometimes becomes green.

- a) Name the blue coloured solution you might have used to show this chemical magic.
- b) What is the name of the green coloured solution which appears after some time?
- c) Write the chemical reaction to justify this chemical magic.

4. Write the chemical reactions and colour changes for the following cases:

- a) Some pieces of copper dropped in dilute sulphuric acid.
- b) Some zinc granules dropped in Copper Sulphate Solution.

5. Complete and balance the following chemical reactions:

- a) $\text{Mg (s)} + \text{H}_2\text{SO}_4 \text{ (aq)} \rightarrow \text{MgSO}_4 \text{ (s)} + \underline{\hspace{2cm}}$
- b) $\text{Na (s)} + \text{H}_2\text{O (l)} \rightarrow \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

6. A student of class VIII takes 4-5 drops of dilute Hydrochloric acid in a test tube (*fitted in a test tube holder*) and then dropped 2 small pieces of magnesium in it. He observes some bubbles of gases oozing out. (*This experiment should be done under the guidance and precautions of a teacher*)

- a) Which gas is expected to be produced in the experiment?
- b) Write the chemical reaction occurring in this experiment.

7. Write the name and one use of the metals based on their following properties.

- a) Metals are sonorous.
- b) Metals are lusturous.
- c) Metals are good conductors of heat.
- d) Metals are good conductors of electricity.

8. Name two important non-metals which are used in electrical appliances and also mention their uses.

9. Which non-metallic gas is used in gas balloons played by children?

10. Name the non-metallic gas which is used in liquid form as a rocket fuel?
