

Dr. M.K.K. Arya Model school, Model town, Panipat
Assignment
Class-8
Metals and Non- metals

1. Metals can be distinguished from non- metals on the basis of their physical and chemical properties.
2. Malleability is that property of metals due to which they can be hammered into thin sheets.
3. Ductility is that property of metals due to which they can be drawn into thin wires. Gold, silver and copper do not react with hydrochloric acid.

One mark questions

4. how many elements occur naturally ?
94 elements are naturally occurring elements, out of which 72 are metals, and 20 non-metals and 2 metalloids.
5. Name four major metals.
Silver, gold, copper and iron.
6. Name the four major non-metals.
Sulphur, carbon, oxygen, phosphorus.
7. What are sonorous substances?
The substances that produce ringing sounds are called sonorous substances. e.g.- iron bell.
8. Name four metals which are good conductor of electricity.
Gold, silver, copper and Aluminum.
9. Why is sodium kept in kerosene oil?
Sodium kept in kerosene oil because being a highly reactive metal it starts burning in open air.
10. What is formed by metals burning in air?
Metallic oxides.
11. Name the two acids.
Sulphuric acid and hydrochloric acid.

Two marks Questions

12. How are metals and non-metals differentiated? Give two examples of each ?
Metals and non-metals are differentiated on the basis of their physical and chemical properties.
Examples of metals – Gold, silver, iron, copper.
Examples of non-metals – Sulphur, carbon, oxygen, phosphorus.
12. Why cooking utensils are made up of metals whereas handle of these utensils are made from wood?
Metals are conductors of heat, so utensils are made from them (copper, aluminum, iron etc) whereas their handles are made from non-metals (wood, Bakelite etc.) because they do not conduct heat as they are bad conductor.
13. Why do the gold ornaments look new even after using several years?
Gold is least reactive metal, so its corrosion does not take place, as a result of which its luster is not lost. Gold is not affected by air, water and acids.

Three marks questions

14. write any four physical properties of metals.
 1. Metals have metallic lustre.
 2. Metals are good conductors of heat and electricity.
 3. Metals are generally hard. (Mercury is its exception)
 4. Metals are malleable and ductile.

15. discuss the physical properties of non-metals.

1. Non-metals are generally brittle.
2. The properties of malleability and ductility are not found in them.
3. They do not have luster and they cannot be polished.
4. Non- metals are bad conductors of heat and electricity. (Graphite is an exception)
5. They are present in all the three states- solid, liquid and gas.

16. write the main uses of metals.

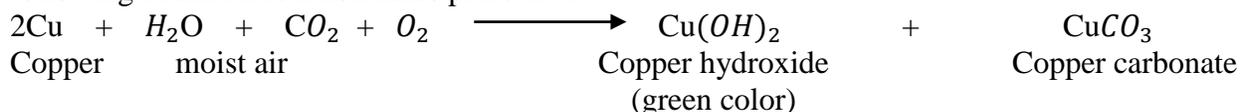
1. Metals like copper and aluminum are used for electric transmission.
2. Metals like iron, aluminum and copper are used for making domestic utensils and machines for factories.
3. Gold and silver are used for making jewelry and for applying foils or sweets.
4. Aluminum foil is used for packing food articles.
5. Liquid metal mercury (Hg) is used in thermometers
6. Silver is used in making of high reflecting mirrors.

17. write the main uses of non-metals.

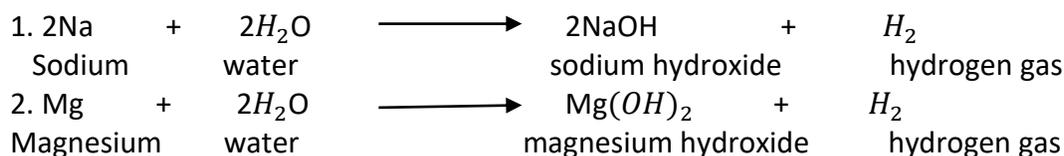
1. Oxygen is used by plants and animals for respiration process.
2. Nitrogen provides nutrients to plants in nutrition form.
3. Chlorine is used to kill germs.
4. Sulphur is used in making sulphuric acid, which is an important industrial chemical.
5. Oxygen aeroplanes also supports combustion reactions in factories, homes, and missiles.
6. A solution of iodine in alcohol is applied on the wounds in the form of an antiseptic.

18. What happens when a copper vessel is exposed to moist air for long time ?

When a copper vessel is exposed to moist for long time, it acquires a dull green coating. The following chemical reaction takes place in it:



19. Write the reactions of metals and non- metals with water.



20. What is rust ?

When iron is exposed to air and moisture, then a brown colored layer is formed over its surface.

This brown colored layer is moisture of iron oxide and iron hydroxide. This is called rust.

