

Dr. VirendraSwarup Education Centre, Shyam Nagar

Holiday Homework Worksheet

Class VII

I. Write the molecular formulae of the following by criss cross method –

1. Calcium Chloride \_\_\_\_\_
2. Aluminium Nitrate \_\_\_\_\_
3. Sodium Bicarbonate \_\_\_\_\_
4. Ferrous Sulphate \_\_\_\_\_
5. Lead (2) Nitrate \_\_\_\_\_

II. Balance the following equations –

1.  $\text{KOH} + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$
2.  $\text{Mg} + \text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2$
3.  $\text{CaCO}_3 + \text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2$
4.  $\text{Fe} + \text{H}_2\text{O} \rightarrow \text{Fe}_2\text{O}_3 + \text{H}_2$
5.  $\text{KClO}_3 \rightarrow \text{KCl} + \text{O}_2$

III. Given below are some statements given by different chemicals, Recognise these chemicals and write their names :

1. A : I am red in colour. I am obtained from lichens. When I am mixed with soap solution, I change my colour.  
I am \_\_\_\_\_
2. B : I am found in lemon and orange. When I mix with blue litmus, I change its colour into blue.  
I am \_\_\_\_\_
3. C : I am one of the most commonly used chemical. I can bet that you use me everyday in your food. My colour is white.  
I am \_\_\_\_\_
4. D : I am called the king of all chemicals due to my extensive use. I am used to prepare aqua regia.  
I am \_\_\_\_\_
5. E : I am usually called as lime water. I am widely used to prepare bleaching powder.  
I am \_\_\_\_\_
6. F : I am a transparent chemical but when I am mixed with caustic soda, I become pink in colour.  
I am \_\_\_\_\_

IV. Write the symbols/ formula and valencies of the following :

1. Copper \_\_\_\_\_
2. Carbonate \_\_\_\_\_
3. Sulphate \_\_\_\_\_
4. Nitrite \_\_\_\_\_
5. Sulphite \_\_\_\_\_
6. Ammonium \_\_\_\_\_
7. Acetate \_\_\_\_\_
8. Nitrate \_\_\_\_\_
9. Phosphate \_\_\_\_\_
10. Chloride \_\_\_\_\_