**Holiday home Work for autumn break**

**Class X**

1. **Learn reactivity series and write 4 times.**
2. **Write 20 displacement reactions on the bases of reactivity series.**
3. **Write all activity of chapter “Chemical reaction and equation” chemical reaction with diagram.**

**Activity 1. Burning of magnesium ribbon**

**Activity 2. Reaction of Lead nitrate solution and potassium iodide**

**Activity 3. Reaction of Zinc granules with Acid**

**Activity 4. Calcium oxide with water. Observe temperature. (Exothermic/endothermic)**

**Activiyt 5. Heating of Ferrous sulphate crystal.**

**Activity 6. Heating of Lead nitrate**

**Acitivity 7. Electrolysis of water.**

**Acivity 8. Photochemical reaction of Silver Chloride.**

**Activity 9. Displacement Reaction**

**Activity 10. Double Displacement Reaction**

**Activity 11. Oxidation and readuction**

1. **Solve question from Sample Paper.**
2. **(i) Write two observations when lead nitrate is heated in a test tube.  
   (ii) Name the type of reaction.  
   (iii) Write a balanced chemical equation to represent the above reaction.**
3. **A compound ‘X’ of sodium is used as an antacid and it decomposes on strong heating.  
   (i) Name the compound ‘X’ and give its chemical formula.  
   (ii) Write a balanced chemical equation to represent the decomposition of ‘X’.  
   (iii) Give one use of compound ‘X’ besides an antacid.**
4. **You are provided with 90 mL of distilled water and 10 mL of concentrated sulphuric acid  
   to prepare dilute sulphuric acid.  
   (i) What is the correct way of preparing dilute sulphuric acid? Give reason.  
   (ii) How will the concentration of H3O + ions change on dilution?**
5. **Two elements X and Y have atomic numbers 12 and 16 respectively. To which period of  
   the modern periodic table do these two elements belong? What type of bond will be  
   formed between them and why? Also give the chemical formula of the compound  
   formed.**
6. **Metal X is found in nature as its sulphide XS. It is used in the galvanisation of iron  
   articles. Identify the metal X. How will you convert this sulphide ore into the metal?  
   Explain with equations**
7. **State the reason for the following:  
   (i) Aluminium oxide is called an amphoteric oxide.  
   (ii) An iron strip dipped in a blue copper sulphate solution turns the blue  
   solution pale green.  
   (iii) Hydrogen gas is not evolved when most metals react with nitric acid.  
   (iv) Calcium does not occur in free state in nature.  
   (v) Sodium or potassium metals are kept immersed under kerosene.**
8. **A. pH in everyday life Application**

**B. Uses of Salt of chapter acid base and salt.**