

E- max international school

Class 10<sup>th</sup> Summer vacations Homework



➤ **Subject :English**

➤ **\*\*\*\*Project Work\*\*†\*\***

**Make a project file on the chapter "Nelson Mandela"**

**Topics....**

**1.life span of Nelson Mandela**

**2.Present condition of South Africa**

**3.Inter relationship of India vs South Africa**

➤ **\*\*\*\*\* Writing /Grammar\*\*\*\*\***

**Write 100 action verbs**

**For example    Jump            jumped            jumped**

➤ **(Science)**

**Task I- Prepare a working model on any one of the following:-**

**1. Electrolysis of Water**

**2. Electromagnet**

**3. Magnetic levitation**

**4. Simple electrical circuit**

**5. Natural acid and base indicators**

**Task II- Draw flow chart/ diagrams on the following topics on A4 size sheets:-**

**1. Human Respiration**

**2.Human Nutrition**

**3.Human Transportation.**

**Task III- Complete the given assignments.**

**CH. 1 Chemical Reactions and Equations**

**1. Why should a magnesium ribbon be cleaned before burning in air?**

2. Write the balanced equation for the following chemical reactions.

(i) Hydrogen + Chlorine. Hydrogen chloride

(ii) Barium chloride + Aluminium sulphate → Barium sulphate + Aluminium chloride

(iii) Sodium + Water Sodium hydroxide + Hydrogen

3. Write a balanced chemical equation with state symbols for the following reactions.

(i) Solution of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.

(ii) Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) produce sodium chloride solution and water.

4. A solution of a substance 'X' is used for white washing.

(i) Name the substance X and write its formula.

(i) Write the reaction of the substance 'X' named in (i) above with water.

5. Why is the amount of gas collected in one of the test tubes in the activity for the electrolysis of the water double of the amount collected in the other? Name the gas.

6.. Write the balanced chemical equations of the following reactions. (b) Zinc+ Silver nitrate  
Zinc nitrate + Silver (c) Aluminium + Copper chloride → Aluminium chloride + Copper  
(d) Barium chloride + Potassium sulphate Barium sulphate + Potassium chloride.

Ch : 2 Acid and base

1. Mention the range of pH value for identification of a base. 8. do HCl, HNO<sub>3</sub>, etc., show acidic characters in aqueous solutions while solutions of compounds like alcohol and glucose do not show acidic character.

2. Why does an aqueous solution of an acid conduct electricity? 10. Why does dry HCl gas not change the colour of the dry litmus paper?

3.. While diluting an acid, why is it recommended that the acid should be added to water and not water to the acid?

4. How is the concentration of hydronium ions (H<sub>3</sub>O<sup>+</sup>) affected when a solution of an acid is diluted?

5.. How is the concentration of hydroxide ions (OH<sup>-</sup>) affected when excess base is dissolved in

**a solution?**

CH. 5 Life Processes

1. What is the role of saliva in the digestion of food?
2. What are the necessary conditions for autotrophic nutrition ? what are its by-products?
3. What are the differences between aerobic and anaerobic respiration ? name some organisms that use the aerobic respiration? name some organisms that use the anaerobic mode of respiration.
4. How are the alveoli designed to maximize the exchange of gases ?
5. Describe double circulation in human beings. Why is it necessary?

### **(Computer )**

1. Make five video related to your chapter and send .
2. Make your YouTube channel and post all subject video on your channel.
3. Make project on web application ( computer network, topology, all type of computer virus ) on assignment sheet .
4. Make ppt of your project.
5. Learn completed chapter properly .
6. Read chapter Database management system and watch video

### **(Hindi)**

**Make five video related to your chapter and send .**

**Make your YouTube channel and post all subject video on your channel.**

- 3) .Make a project on "Vaakya " on assignment sheets.
- 4) Learn Unit 1 Syllabus properly .
- 5) Read ch 4 and 5 of Kshitij make video .

### **Maths**

**Chapter 5, 7,8,14 and 15 do all examples of these chapters.**



Happy  
Holidays

FROM THE TEAM AT  
ignite  
travel group