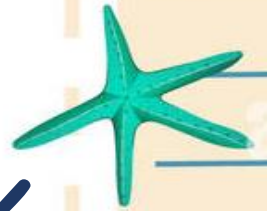




# SUMMER VACATION



## HOLIDAY HOMEWORK

GRADE - XII (Science)





**The holiday season is a perfect time to reflect on blessings, and take out ways to make life better for those around us.**

Summer vacation is probably the best time of the year for you all. It's time for loads of fun though we cannot go out but getting pampered to no end and of course bonding with distant friends and cousins can be done. A time to relax as well as fruitfully occupy the children in various scholastic and co-scholastic areas. Here are a few suggestions-

- \* Make your child read Hindi and English story books and children's science magazine as much as possible.
- \* Encourage them to undertake creative writing, both in Hindi and English. You can tell them to write their experiences about vacation and maintain a daily diary. Even watching good English movies can be an enjoyable learning experience.
- \* To make them aware of their surroundings, tell them to watch videos on television channels like Discovery, National Geographic, History and Animal planet.
- \* Do enhance creative talent, motivate them to draw, paint, prepare a PPT on any family celebration or any activity that interests them.
- \* Make sure that you spent quality time with your ward. Go for walks with the family. You will realize you have two God's greatest gifts...NATURE and your FAMILY. Do not forget to thank God for these gifts.
- \* Giving them small responsibility in household chores will make them independent.
- \* Teach them the importance of moral values in life. Remember the four magic words....PLEASE, THANK YOU, SORRY and EXCUSE ME. Make these a part of your personality.
- \* Indulge yourself in various games with them.

Our teachers have painstakingly designed interesting projects /assignments for children to be completed during the summer vacation. This would encourage in-depth learning, strengthen concepts and prepare ground for improved academic output. The key purpose of holiday homework is to inculcate 6C's in our children. It aims at encouraging creativity, character building, citizenship, communication, critical thinking and problem-solving and collaboration in the learners.

Parents can download holiday homework from school's website i.e. [www.lotusvalley.edu.in](http://www.lotusvalley.edu.in) or e-care pro app.

**NOTICE:-**

The school closes for summer vacation on May 29, 2023 and the school reopens on July 4, 2023 with the same timings.

**Wish you all a fun filled, safe and healthy holidays ahead !**



## Holidays Homework Class – XII (Science)

### Physics

Learn and Revise

Unit 1: Electrostatics.

Unit 2: Current electricity.

Unit 6: Ray Optics only.

### **Make Working Models on**

(i) How to create a Visual Doppler (Roll No. 1-3)

(ii) Buoyancy 101 (Roll No. 5-9)

(iii) Heat Transfer in an incandescent lamp (Roll No. 10-13)

(iv) Insulation value thermal (Roll No. 14-17)

(v) Recycled Material for ^ Insulation (Roll No. 18-21)

(vi) Marvelous Magnetics (Roll No. 22-26)

(vii) Observation of I<sub>ias</sub> in Infrared Spectrum (Roll No. 27-30)

(viii) Make a Counter (Roll No. 31-34)

### Mathematics

Revise and practice the syllabus

CH-2 (Inverse trigonometric functions)

CH-3 (Algebra of Matrices)

CH-4 (Determinant)

CH-5 (Matrix (continued))

CH-6 (Continuity and differentiability)

CH-7 (Differentiation)

Complete your first 5 lab Manual activities discussed in class.

### Biology

Learn and revise chapter

Sexual Reproduction in flowering plants.

ch: Human Reproduction

ch: Reproductive Health

ch: Principles of Inheritance and variation

ch: Health and disease

ch: Microbes in human welfare

### **Project**

1. Working model of Blood typing / Biodiversity project (Roll No. 1 to 4)

2. Working Blood pressure measuring (Roll No. 5 to 8)

3. Working model of IVF (Roll No. 9 to 13)

4. Working model of fetus developmental model (Roll No. 14 to 18)

5. Working first artificial baby created (Roll No. 19 to 23)

### English

Learn and Revise the syllabus given below :

### **Flamingo**

ch-1 The last lesson

ch- 2 Lost spring

ch- 3 deep water

Poem 1- My mother at sixty

Poem 2- Keeping quiet

## Vistas

ch1 - The third level

ch2 - The tiger King

ch3- Journey to the end of the earth.

Notice writing

Letter writing - letter to editor

## Project work

1. My mother at sixty six - display chart (Roll No. 1 to 5)
2. The Third level – display model (Roll No. 6 to 10)
3. Journey to the end of earth - display model (Roll No. 11 to 15)
4. Deep water - display model chart (Roll No. 16 to 20)
5. Lost spring - display Model – chart (Roll No. 21 to 25)

## Chemistry

Learn and Revise the syllabus given below.

Chapter 1- Solutions

Chapter2 - Electrochemistry

Complete your notes and practice numericals of each topic.

## Project

1. Vitamins (Roll No. 1 to 10)
2. Commercial cells (Roll No. 11 to 20)
3. Proteins (Roll No. 21 to 30)
4. Application of Co-ordination Compounds (Roll No. 31 to 40)
5. Carbohydrates (Roll No. 41 to 50)
6. Colligative properties (osmosis, depression in freezing point mainly on application) (Roll No. 51 to 62)

## Working Model of Chemistry

1. Extraction of Nicotine sulphate from sample of cigarettes (Roll No. 1 to 10)
2. Check the ions present in tooth paste (Roll No. 11 to 20)
3. Plastic recycling (Roll No. 21 to 30)
4. Synthesis of Aspirin (Roll No. 31 to 40)
5. Analysis of fertilizers (Roll No. 41 to 50)
6. Paper chromatography (Roll No. 51 to 62)

## Information Technology

1. Make a beautiful & coloured chart of the following (1 each)

