



**KIIT World School**

I am a Promise, I am a Possibility



# SUMMER HOLIDAYS' HOMEWORK

Hope your summer is filled with **reading, writing,**  
and most of all...**fun!**

**Class XI**





**KIIT World School**

I am a Promise, I am a Possibility

*Never  
STOP  
Learning!*

Dear Parents,

In summer's golden embrace, behold the holidays' allure,  
When sun-kissed days dance freely, hearts find joy secure.  
From bustling cities to serene shores, a world ablaze with glee,  
Summer holidays arrive, unlocking souls and setting spirits free.

Summer vacations are a great time for the children to take a break from school and explore new interests and activities. So, let's pursue some interests and engage them in meaningful activities that can help them grow and develop.

- Summer vacations offer an excellent opportunity to pursue hobbies and master vital life skills like cooking, cleaning, and gardening, which not only aid in personal growth but also instil self-confidence and a lifelong love of learning.
- Help your child to be an early bird. Waking up early has two benefits. First you can stay productive and secondly you can do more activities that are stimulating and fun.
- Teach your child not to waste food. Acquaint with the hard work put in by the mothers and farmers.
- Expand your child's horizons and make him/her learn a new language while enjoying the holidays.
- Give wings to your child's imagination by the joy of reading, by visiting local libraries or bookstores, engaging math lessons with cooking, grocery shopping, and discovering the fascinating world of numbers.
- As a society, we are more connected and yet also less connected than ever before. So, in order to abridge this gap, share the values and culture of the extended family system by sharing interesting talks and anecdotes related to the same.
- Spend time outdoors with your child as it is the perfect time to engage in outdoor activities.
- Make travel plans with children to unveil captivating cultures, rich history, and breath-taking landscapes, as museums, historical sites, and national parks become their gateway to knowledge and adventure.
- Embrace the summer break with joyous bonding through board games, movie nights, culinary adventures, and making your children lend a hand in the household, forging cherished connections that last a lifetime.
- Carve out family time at the end of the day. Share stories with your children and impart some valuable life lessons and morals.

Last but not least, laugh together and strengthen your bond.

**The last day for submission of holidays' homework is June 27, 2023, from 8:00am to 1:00pm**



**Kindly note: You are requested to submit your Holidays homework on 27 June,2023  
between 8:00 am -1:00 pm to your respective CTs in school.**

**Class XI**

**Holidays Homework 2023 - 24**

**Plagiarism is strictly prohibited**

**SCIENCE STREAM**

**ENGLISH**

As mandated by CBSE, the students have to prepare the following activities and a project for the internal assessment.

**Art Integration Activities**

**Theme - National Integration**

You have to prepare and submit two activities where you integrate art with your subject (any topic/chapter/concept). Under the 'Ek Bharat Shreshtha Bharat' initiative of CBSE, Delhi has been paired with Lakshadweep and Andaman & Nicobar Islands. You should integrate your topic with the partner union territories.

You can choose any two of the following activities and prepare your presentations:-

Posters

Brochures

Scrapbooks

Collages

Storyboards

Caricatures

Doodle art

Painting/ Drawing

**2. Project Work**

**WORD LIMIT - 800 to1000 words**

**Theme – To Explore different types of Relationships**

**Topics Covered: - The Portrait of a Lady**

**A Photograph**

**Father to Son**

**Childhood**

**Date of Submission: June 30, 2023**

**INSTRUCTIONS**

**The project report must include the following:**

**Cover Page**

**Dedication**

**Acknowledgement**

**Certificate**

**Index**

**Aim/Objective**

**Material/Resources required**

**Hypothesis**

**Methodology/Procedure**

**Observations**

**Inferences**

**Conclusion**

**Application**

**Future Scope**

**Log table**

**References/ Bibliography**

2. Any type of A4 size sheets can be used to prepare the project.
3. Relevant pictures, graphical representation and questionnaires must be a part of the project.
4. The Project must have a log table recording your weekly progress.
5. The project must be hand-written in a beautiful and cursive handwriting. You must take care of the aesthetics and presentation of the project keeping in mind the margins and proper spacing/indentation.
6. The project can be spiral-bound or filed neatly.

**Methodology:**

**Identify different types of relationships, such as family, friendships and professional relationships.**

**Research the different aspects of each type of relationship, such as communication, trust, respect, and boundaries.**

**Analyze the different factors that contribute to healthy and positive relationships, such as empathy, active listening, honesty, and compromise.**

**Explore the different challenges that can arise in relationships, such as conflicts, misunderstandings, and differences in personality or values.**

**Develop skills to build and maintain healthy relationships, such as effective communication, conflict resolution, and empathy.**

**Share personal experiences and insights on relationships with peers and mentors.**

**Factors That Contribute to Healthy Relationships: Discuss different factors that contribute to healthy and positive relationships, such as empathy, active listening, honesty, and compromise.**

**Challenges in Relationships: Discuss the different challenges that can arise in relationships, such as conflicts, misunderstandings, and differences in personality or values.**

**Skills to Build and Maintain Healthy Relationships: Discuss skills to build and maintain healthy relationships, such as effective communication, conflict resolution, and empathy.**

**Personal Experiences and Insights:** Share personal experiences and insights on relationships with peers and mentors.  
**Conclusion:** Summarize the findings from the project and highlight the importance of healthy and positive relationships in life.

**Conclusion:**  
The project on relationships aims to help school students understand the importance of healthy and positive relationships in their lives.

## CHEMISTRY

### TASK 1: Investigatory Project

Prepare an investigatory project of chemistry which should be experiment based. It should be a research-based project where every aspect of the topic selected should be discussed in terms of chemistry. The project should have the following key aspects:

- Certificate
- Acknowledgement
- Why was this selected? (Related to daily life)
- Introduction
- Details of the project (research related to the topic)
- Experiment (detailed manner including procedure)
- Observations
- Analysis
- Result
- Bibliography (Mention the links)

Project should be aesthetically prepared. A4 sheets to be used(colored). No print out of content is allowed, only data or pictures can be printed. Project topics allotted are as follows. Use materials as per availability at home. Project must include pictures of experiments performed at home including observations. Content is not the purpose; quality of research is the main objective of this work. Perform the project experimentally and record observations.

	TOPICS (GIVEN TOPICS AS PER ROLL NO. <u>Only</u> )
Roll no 1-10	Determination of the rate of evaporation of different liquids
Roll no 11-20	Study the effect of acids and bases on the tensile strength of fibers.
Roll no 21-30	Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium carbonate on it.
Roll no 31-40	Study of the methods of purification of water and testing some samples.
Roll no 41-last	Setting of cement and analysis

### TASK 2: Moving toward research

Study the research paper provided in the given link titled as “Oil spill risk assessment study for Andaman and Nicobar Islands, India”.

Link : <https://pubs.aip.org/aip/acp/article/2112/1/020026/1024287/Oil-spill-risk-assessment-study-for-Andaman-and>

Based on your study, design a newspaper on A3 sheet showcasing the following aspects:

- a. Oil spill as a major concern
- b. Chemicals exposed through oil spills
- c. Impact on flora and Fauna
- d. Andaman and Nicobar as a major concern
- e. Awareness for a change

You can use pictorial representation, cartoons, editorials etc to design apart from articles and headlines that you may write.

### TASK 3: CORE CONCEPTS PRACTICE

- a. Attempt both sets of PT1 in notebook. All assignments MUST BE COMPLETED till the concepts covered so far.
- b. Solve at least 5 numerical each based on the given formulas- (Total 30 numericals)
  - i. Molarity
  - ii. Molality
  - iii. Percentage composition
  - iv. Mole fraction
  - v. Dilution formula
  - vi. Empirical Formula

	<b>PHYSICS</b>
	<p><b>1.ART INTEGRATION PROJECT</b>          Prepare a flyer (brochure or pamphlet) showing physics behind the formation of the famous Humphrey Strait Creek Bridge, the longest bridge in the Andaman &amp; Nicobar Islands and the lifeline of the people of North &amp; Middle Andaman. It must include the parameters like shape , size, angle, tension, compression, stress, strain , material used, energy, sustainable development etc. Use A3 size sheets and be creative.</p> <p><b>2.PROJECT WORK</b>          Prepare a project of physics which should be research or experiment based (working project), where every aspect of the topic selected should be discussed. The project should have the following key aspects:</p> <ul style="list-style-type: none"> <li>· Certificate</li> <li>· Acknowledgement</li> <li>· Why was this selected? (Related to daily life)</li> <li>· Introduction</li> <li>· Details of the project</li> <li>· Experiment</li> <li>· Observations</li> <li>· Analysis</li> <li>· Result</li> <li>· Bibliography (mention the links)</li> </ul> <p>Project should be aesthetically prepared. Print out of the content is not allowed, only data or pictures can be printed and the same has to be approved first. Project should be on A-4 size plain sheets and the limit of the project is 15-20 pages. Project must include pictures of experiments performed at home including observations</p> <p><b>3. CONCEPT PRACTICE</b></p> <p>a) Attempt both sets of PA1 in the notebook. All assignments <b>MUST BE COMPLETED</b> till the concepts covered so far.</p> <p>b) Prepare concepts of Scalars and vectors with cross product, dot product, projectile motion and circular motion.</p> <p>c) Attempt the worksheet for practice in physics notebook:</p>
	<b>MATHEMATICS</b>
	<p><b>1.PROJECT WORK</b></p> <p><b>FOR ODD ROLL NO.</b></p> <p><b>Prepare a project work on the Venn Diagram answering the question by finding the relevant data and represent all the answers with a 3D Venn Diagram.</b></p> <p><b>Difference between the geographical locations that are in Andaman and Nicobar Islands and those that are in Delhi</b></p> <p><b>Common tourist attractions to both Andaman and Nicobar Islands and Delhi, and</b></p>

which ones are unique to each region

Population of Andaman and Nicobar Islands compare to that of Delhi, and write the total population of both regions combined

Languages spoken in Andaman and Nicobar Islands and Delhi, and which ones are common to both regions?

Geographical locations are neither in Andaman and Nicobar Islands nor in Delhi, and what are some examples of such locations?

Union of Andaman and Nicobar Islands and Delhi compare to the complement of the same regions in terms of population, geographical location, tourist attractions, and languages spoken?

FOR EVEN ROLL NO.

Prepare a project work on the Relation and function answering the question by finding the relevant data and represent all the answers with a 3D pictorial representation.

1. Relation: "Has a common border with"

This is a binary relation that can be defined between any two countries that share a common border. For example, we can say that China has a common border with India and Russia, but not with the United States or Canada.

2. Function: "GDP per capita"

This is a function that takes a country as input and returns its GDP per capita as output. For example, we can define a function  $f(x) = \text{GDP per capita of } x$ , where  $x$  is any country in the G20. We can then use this function to compare the wealth of different countries and analyze the economic performance of the G20 as a whole.

3. Relation: "Is a member of"

This is a binary relation that can be defined between any country and the G20 organization. For example, we can say that Germany is a member of the G20, but not Switzerland or Norway.

4. Function: "Population growth rate"

This is a function that takes a country as input and returns its population growth rate as output. For example, we can define a function  $g(x) = \text{population growth rate of } x$ , where  $x$  is any country in the G20. We can then use this function to analyze the demographics of the G20 and identify trends in population growth.

5. Relation: "Imports from"

This is a binary relation that can be defined between any two countries where one



country imports goods or services from the other. For example, we can say that the United States imports from China and Mexico, but not from Saudi Arabia or Turkey.

#### 6. Function: "Human Development Index (HDI)"

This is a function that takes a country as input and returns its HDI score as output. For example, we can define a function  $h(x)$  = HDI score of  $x$ , where  $x$  is any country in the G20. We can then use this function to compare the standard of living and well-being of different countries in the G20.

### 2.LAB MANUAL ACTIVITY

Activities of Lab Manual to be done in file.

1. To find the number of subsets of a given set and verify that if a set has  $n$  number of elements, then the total number of subsets is  $2^n$ .
2. To verify that for two sets  $A$  and  $B$ ,  $n(A \times B) = pq$  and the total number of relations from  $A$  to  $B$  is  $2^{pq}$ , where  $n(A) = p$  and  $n(B) = q$
3. To represent set theoretic operations using Venn diagrams.
4. To identify a relation and a function.

### 3. CONCEPT PRACTICE

a) Attempt both sets of PA1 in the notebook. Complete all the assignments of the concepts covered so far.

b) Solve the worksheet for practice in Maths notebook.

[https://drive.google.com/drive/folders/1FSLbHbEoRoAXNeFNb2c5TBnOJ48flR55?usp=share link](https://drive.google.com/drive/folders/1FSLbHbEoRoAXNeFNb2c5TBnOJ48flR55?usp=share_link)

### 4.WORKING MODEL.

A working model of Maths based on any concept by each QC.

Model should be eco friendly and prepared without use of plastic.

An example of model has been shared

[https://youtu.be/APVdBJ9o2\\_8](https://youtu.be/APVdBJ9o2_8)

## COMPUTER SCIENCE

### PROJECT WORK

Prepare a project of computer science which should be research or experiment based (working project), where every aspect of the topic selected should be discussed. The project should have the following key aspects:

Certificate

Acknowledgement

Why was this selected? (Related to daily life)

Introduction

Details of the project

Input code

Output

## Result

Bibliography (mention the links)

Project should be aesthetically prepared. Print out of the content is not allowed, only data or pictures can be printed and **the same has to be approved first**. Project should be on A-4 size plain sheets and the limit of the project is 15-20 pages.

## ACTIVITY

- Strengthening and streamlining cooperation between nation-states to promote international trades and helping developing countries becoming self-sufficient and increasing their exports. For instance, India's Vaccination Drive and the government's Make in India campaign.
- Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Choose any one of the above mentioned goals keeping it as the framework for your research and findings. For these, you must identify your team members from your class. Each group has to present their project comprising all the 5 tasks mentioned below. Communicate with each other using any communicating media like Email, WhatsApp, Google Meet etc.

Following are the tasks for the group members:

Task 1: Prepare a questionnaire using 'Google Form' to conduct a survey around your neighborhood to identify a problem (for example - water scarcity and contaminants). Share this survey with each other using Google Docs. Form at least 10 questions in your questionnaire.

Task 2: Collect data from the survey and list down the main points. Learn more about the problems you have identified using sources like the internet or newspapers etc. Discuss with your team members the problems as well as solutions and present it on a shared Google doc.

Task 3: Note down all feasible and infeasible potential solutions(hypotheses) from Google docs (based on the inputs from other team members.)

Task 4: Bring your idea/product/service to life by making a layout of your solution on an A-4 size sheet. Discuss it with the people who helped you in the survey, take their feedback and do the SWOT Analysis

Task 5: Create a business plan (B-plan) for your solution. Identify potential customers. See if they will be willing to pay for your solution - if yes, find out- how much! Take feedback from your customers and incorporate it in your plan /report. Your entrepreneurial journey has begun!

Create a prototype and help your fellow citizens to be benefited by it.

You can present all the above information by way of either a PowerPoint Presentation or a Project file. You can use cartoons/diagrams/flow-charts/ clip arts/graphical representation etc.

Submit the hard copy of the presentation in the folder with proper headings.

Make a poster on the G20 summit theme on the platform of your choice on A3 size sheet.

### PSYCHOLOGY

As per CBSE CURRICULUM 2023-24

Create a presentation on a topic related to the psychology of learning. Choose a topic such as classical conditioning, operant conditioning, or observational learning and create a multimedia presentation that explains the concepts and provides examples.

1. Create your own data with real findings and cases.
2. Present your multimedia presentations with the help of models with aesthetic work.
3. Be creative and artistic with the model that shows your findings of real life examples.

**REPORT-** Prepare a report on your topic with your findings and write outcomes from the learning with model and presentation

### BIOLOGY

1. **Project Report** : Create a biology project based on research, case study, or experiment. The project should cover all aspects of the chosen topic and include the following key components:

- Certificate of completion
- Acknowledgment section
- Explanation of why the topic was chosen and its relevance to daily life
- Introduction to the topic
- Detailed description of the project, including methodology and materials used
- Presentation of experiment or case study
- Discussion of observations and conclusions drawn from the project
- Analysis of findings and their significance
- Results section
- Discussion of future research directions for the topic
- Bibliography, including links and references used

The project should be presented in an aesthetically pleasing manner, using A4 size plain sheets. The content of the project should not be printed out, but rather presented using data or pictures. The project length should be limited to 15-20 pages.

#### **2. Art Integration :**

The Andaman and Nicobar Islands are home to some of the most vibrant coral reefs in the world. Research about the species of fish and coral that are found there and create 3D dioramas of a coral reef ecosystem. You can use a variety of materials, such as clay, cardboard, or paper mache, to create the reef structure, and then use paint or colored paper to add the coral and the fish.

**3. Practice assignment :**

Practice the assignment questions in the biology notebook.

**Link for assignment:**

<https://docs.google.com/document/d/1JEigSMwqHJ22isdqgE4bkKKTl69H3W93hAmGNA8YDCI/edit?usp=drivesdk>