

Summer Holiday Homework
Class – XI-A
Chemistry

1. Complete” Investigatory Projects”.

The Project includes

Write-up: Title, Acknowledgement, certificate, Index, theory, diagrams and other components of the project, Applications, Bibliography.

Scientific investigations involving laboratory testing and collecting information from other sources.

Suggested Investigatory Projects (any one)

- Checking the bacterial contamination in drinking water by testing sulphide ion.
- Study of the methods of purification of water.
- Testing the hardness, presence of Iron, Fluoride, Chloride, etc., depending upon the regional variation in drinking water and study of causes of presence of these ions above permissible limit (if any).
 - Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium Carbonate on it.
 - Study the acidity of different samples of tea leaves.
 - Determination of the rate of evaporation of different liquids.
 - Study the effect of acids and bases on the tensile strength of fibers.
 - Study of acidity of fruit and vegetable juices.

2. Solve all NCERT exercise question of Ch-1 in your note book.

3. Prepare a power point presentation on one topic of your choice from chapter 1,2&3.

ENGLISH HOLIDAY HOMEWORK

1) . Read the newspaper everyday and collect one good article/feature each related to the Elderly, Adventure, Environmental hazards and paste them in your Class registers.

2) . Collect information related to King Tut and the Egyptian Civilization. Present it through Power Point (about 10-12 slides)

3) . Write an article on 'Tourism and its future in India' in about 200 words.

4) . Read any one novel of your choice and write the review.

a. The Adventures of Huckleberry Finn by Mark Twain

b. 1984...by George Orwell

c. To Sir with Love- E.R. Braithwaite

d. Great Expectations- Charles Dickens

How to do:- The review is to be written in 250-300 words keeping in mind the given aspects:

- About the Writer
- Summary
- Favourite character

- Analysis

Where to do:- A4 Size sheets

Parameters for Assessment:- Content, language and accuracy.

5) Make a video presentation. Record in your voice any poetry, story, write up, any summary of story from your story book in interesting way.

Criteria :-

- Voice Modulation
- Vocabulary
- Intonation
- Confidence

Recording should be of 3 – 4 mins.

Send on WhatsApp 9997666116 / email – priyakalra1972@ gmail.com

Mathematics holiday homework

- Prepare a presentation on chapter 6 Linear inequalities
- Prepare the mind map also for chapter 6 linear inequalities
- (DO THIS ASSIGNMENT IN MATHS NOTEBOOK)

1. Classify the chart of Number System.
2. Write one point difference between Roster and Set-builder form of the Set.
3. Define the following terms: (i) Void Set. (ii) Interval (iii) Power Set (iv) Universal Set.
4. Given that $N = \{1, 2, 3, \dots, 100\}$, then
 - (i) Write the subset A of N, whose element are odd numbers.
 - (ii) Write the subset B of N, whose element are represented by $x + 2$, where $x \in N$.
5. Let $X = \{1, 2, 3, 4, 5, 6\}$. If n represent any member of X, express the following as sets :
 - (i) $n + 5 = 8$
 - (ii) n is greater than 4.
6. From 50 students taking examinations in Mathematics, Physics and Chemistry, each of the student has passed in at least one of the subject, 37 passed Mathematics, 24 Physics and 43 Chemistry. At most 19 passed Mathematics and Physics, at most 29 Mathematics and Chemistry and at most 20 Physics and Chemistry. What is the largest possible number that could have passed all three examination?
7. Using properties of sets prove the following
 - (i) For all sets A and B, $A \cup (B - A) = A \cup B$
 - (ii) For all sets A and B, $A - (A - B) = A \cap B$
 - (iii) For all sets A and B, $A - (A \cap B) = A - B$
 - (iv) For all sets A and B, $(A \cup B) - B = A - B$
8. In a group of 50 students, the number of students studying French, English, Sanskrit were found to be as follows: French = 17, English = 13, Sanskrit = 15, French and English = 09, English and Sanskrit = 4, French and Sanskrit = 5, English, French and Sanskrit = 3. Find the number of students who study

- (i) French only (ii) French and Sanskrit but not English (iii) English only (iv) French and English but not Sanskrit (v) Sanskrit only (vi) at least one of the three languages (vii) English and Sanskrit (viii) none of the three languages but not French
9. Let U be the set of all boys and girls in a school, G be the set of all girls in the school, B be the set of all boys in the school, and S be the set of all students in the school who take swimming. Some, but not all, students in the school take swimming. Draw a Venn diagram showing one of the possible interrelationships among sets U , G , B and S .
10. Show that $A \cup B = A \cap B$ implies $A = B$
11. For any sets A and B , show that $P(A \cap B) = P(A) \cap P(B)$
12. Let A , B , and C be the sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$. Show that $B = C$

Physical education holiday homework

- Practical file Physical Education.
- Include one sports of your choice ,
- 5 Yoga asana with their benefits.

IP holiday homework

Prepare one file of any 6 python programs with output(manually). First page should contain Introduction of python programming language.

Physics holiday homework

Explanation should be given by using graphs and figures. Formula must be written with usual standard notations in the form of 'Project or Activities or Power Point Presentation'. All representation to be done.

Project 1-Representation of at least twenty SI Units & Dimensional Formula of Different Physical quantities.

Project 2- Graphical Presentation of uniformly accelerated motion by following graphs

- (i) Displacement Vs Time
- (ii) Velocity Vs Time
- (iii) Acceleration Vs Time

Project 3-Geometrical representation of (i) Addition of two and more than two vectors (ii) Subtraction of two vectors