

**Holiday Homework: Class-X (2023-24)**

***Important Instructions:***

*The holiday homework is a part of an internal assessment. So, it has to be done diligently and must be produced when asked for submission.*

**English**

*Your holiday homework this year is a fine blend of all the aspects of the language. It has been designed to ensure that you learn with fun.*

**1. LETTER WRITING ACTIVITY: Write the following letters:**

- Write a letter to the Editor of a newspaper against the use of unfair means by students in examinations. Your name is Pankaj Walia and you live at 17, Model Town, Nawanshahar. (150-200 words)
- Write a letter to the Editor of 'The Times of India' Complaining about the nuisance created by the use of loudspeakers. You are Piyush Sharma, a resident of sector 15, Vasundhara Enclave, New Delhi. (150-200 words)
- Write a letter to the Sales Manager, Arya Publications, Ashok Vihar, Delhi, placing order for class IX reference books of all the subjects for educational purpose. You are Sanjeev/Sanjana, 12/CA, Model Town, Kurukshetra. (150-200 words)
- You are interested in taking online classes from ALLEN, a reputed provider of online classes in Varanasi. Having found the site's information inadequate, write letter enquiring various details regarding the functioning of the classes that you intend to avail from. You are Udit/Udit from Bhopal. (150-200 words)

**2. COMIC STRIP ACTIVITY:** Prepare a Comic Strip on Any social theme from the contemporary issues. Give it a suitable and catchy heading to make it look impressive. It shall be explained by you in the class as a part of **Multiple Assessments/Portfolio** when the school reopens. You may use an A4 Sheet for the activity.

**3. BOOK MARK MAKING ACTIVITY:** Make a beautiful bookmark for your Literature reader. Decorate it and write an inspirational quotation which inspires you. Get the bookmark laminated.

**4. FUN WITH GRAMMAR:** Learn the given topics from the links provided and practice them in your English notebook:

a. Determiners: <https://tinyurl.com/ytc69uzu>

<https://youtu.be/paZmDFwYB58>

b. Tense: <https://tinyurl.com/3hkpun74>

<https://youtu.be/cYAaGmICm3U>

<https://youtu.be/pXZtRXpGNck>

c. Clauses: <https://tinyurl.com/55adx2rh>

[https://youtu.be/\\_jTydlA2Nno](https://youtu.be/_jTydlA2Nno)

d. Modals: <https://tinyurl.com/2aknjc2z>

<https://youtu.be/tkgaFERmSCM>

<https://youtu.be/1o9twUvY7Qo>

e. Voice: <https://tinyurl.com/3ydv6svd>

[https://youtu.be/My7XX\\_IzH4U](https://youtu.be/My7XX_IzH4U)

<https://youtu.be/VT5kM7Ugpgw>

f. Reported Speech: <https://tinyurl.com/2p9bewht>

<https://youtu.be/RMlexWdwTuM>

<https://tinyurl.com/5e68zjhpq>

Preposition:

<https://tinyurl.com/eyp6dnpc>

<https://tinyurl.com/mpvtadky>

<https://youtu.be/acTcYV9fLCs>

h. Subject – Verb Concord (Agreement):

<https://tinyurl.com/2p94bxkb>

<https://tinyurl.com/yck5ne3s>

<https://tinyurl.com/bddu458n>

## **Hindi**

१) मीराबाई, सुभद्रा कुमारी चौहान, महादेवी वर्मा, सरोजिनी नायडू, अमृता प्रीतम, रवीन्द्रनाथ ठाकुर, मैथिलीशरण गुप्त कोई तीन रचनाकारों के जीवन परिचय का कार्ड निम्न बिन्दुओं के आधार पर बनाइए- जन्म, मृत्यु, रचनाएँ, शिक्षा, साहित्यिक योगदान। (पहले पृष्ठ में साहित्यकार का नाम, चित्र तथा अन्य पृष्ठ में उपर्युक्त बिन्दुओं को लिखिए)

२) ऑनलाइन शॉपिंग, मोबाइल फोन रिपेयरिंग तथा स्वास्थ्य विभाग के तरफ से साफ सफाई पर आकर्षक विज्ञापन तैयार कीजिये। (लेखन कार्य A4 साइज पेपर में करना है)

३) कबीर की साखी याद कीजिए तथा कलात्मक ढंग से लिखिए। (लेखन कार्य A4 साइज पेपर में करना है)

४) 'शिक्षा रटत विद्या नहीं है' इस विषय पर दस से पन्द्रह पंक्तियों की परिचर्चा तैयार कीजिए।

५) 'पढ़ाई और खेलकूद साथ चल सकते हैं' शीर्षक पर दो से तीन मिनट का वाद-विवाद तैयार कीजिए।

६) 'तीसरी कसम', 'कर चले हम फ़िदा' फिल्मों को देखिये तथा 100 से 150 शब्दों में दोनों का सारांश अलग-अलग A4 साइज पेपर में लिखकर बुकजैकेट में प्रस्तुत कीजिए।

७) कविता याद कीजिए -

क. कवि निदा फाजली (कविता: सफ़र में धूप तो होगी)

ख. कवि रामधारी सिंह 'दिनकर' (कविता: कलम या कि तलवार)

(नोट: 1. सभी कार्यों की एक फ़ाइल तैयार कीजिए।

2. उपर्युक्त सभी कार्यों के लिए 25 अंक निर्धारित किये गए हैं जो आन्तरिक मूल्यांकन में दिए जाएँगे। )

## **Mathematics**

### **PROJECT WORK**

(PREPARE A PROJECT FILE)

With the help of Wikipedia link provided below, write the biography of Brahmagupta including his mathematical achievements. Also paste his photographs (post card size).

<https://en.wikipedia.org/wiki/Brahmagupta>

### **ART INTEGRATED ACTIVITY**

(TO BE DONE IN MATH LAB MANUAL ACTIVITY NOTE BOOK)

How to find the H.C.F. of two numbers by paper cutting activity. Watch the video and write the activity in your lab manual. (Link provided below)

<https://youtu.be/Wa5bGgtxNO8> (VIDEO TIME 2.14 MINUTES)

## WORK SHEET (REAL NUMBERS)

### ASSIGNMENT (TO BE DONE IN MATHS NOTE BOOK)

- Q1. Find the L.C.M. of 96 and 404 by the prime factorization method.
- Q2. Find the HCF and LCM of 6, 72 and 120, using the prime factorization, Method.
- Q3. Given that  $\text{HCF}(306, 657) = 9$ , find  $\text{LCM}(306, 657)$ .
- Q4. Check whether  $6n$  can end with the digit 0 for any natural number  $n$ .
- Q5. Explain why  $7 \times 11 \times 13 + 13$  and  $7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 + 5$  are composite numbers.
- Q6. There is a circular path around a sports field. Navya takes 18 minutes to drive one round of the field, while Neeraj takes 12 minutes for the same. Suppose they both start at the same point and at the same time, and go in the same direction. After how many minutes will they meet again at the starting point?
- Q7. Prove that  $\sqrt{3}$  is irrational.
- Q8. Show that  $5 - \sqrt{3}$  is irrational.
- Q9. Without actually performing the long division, state whether the following rational numbers will have a terminating decimal expansion or a non-terminating repeating decimal expansion:  
(i)  $13/3125$  (ii)  $17/8$  (iii)  $64/455$  (iv)  $15/1600$  (v)  $29/343$
- Q10. Write the sum of the exponents of prime factors in the prime factorization of 98.

### FORMULA DIARY & MIND MAPS:

1. Write all the formulas of chapters -1, 2 and 3 of the N.C.E.R.T. Textbook in your note book/diary and memorize all these formulas. As soon as the school resumes there will be a formula test and the marks you obtain in this test will be taken into account while doing the internal assessment.

2. Using the link provided below prepare the mind maps of chapters -1, 2 and 3.

<https://tinyurl.com/594snn78>

### **REFERENCES: -**

N.C.E.R.T. TEXT BOOK

<https://youtu.be/GBW3I0mjUvI> (COMPLETE VIDEO ON REAL NUMBERS, TIME 57.34 MINUTES)

<https://youtu.be/Rgg7P7DLx94> (COMPLETE VIDEO ON POLYNOMIALS, TIME 37.50 MINUTES)

## Science PHYSICS

- ❖ Prepare a record of Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determining its resistance. Also plotting a graph between V and I.
- ❖ To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.
- ❖ Space science development in India: Prepare Flow chart from Aryabhatta till date.
- ❖ Science of Cinematography: write up along with diagrams
- ❖ Make a survey of events where you notice inter-conversion of different forms of energy. Hence list the names of transducers.
- ❖ Prepare Mind-map of chapter: CURRENT ELECTRICITY for the sources available on internet.
- ❖ Learn notes of chapter Current Electricity & Practice below mentioned numerical on fair copy.
  1. Lightning is very good example of natural current. In typical lightning, there is  $10^9$  J energy transfer across the potential difference of  $5 \times 10^7$  V during a time interval of 0.2 s. Using this information, estimate the following quantities (a) total amount of charge transferred between cloud and ground (b) the current in the lightning bolt (c) the power delivered in 0.2 s.
  2. what is principle of quantization?
  3. An electronics hobbyist is building a radio which requires  $150 \Omega$  in her circuit, but she has only  $220 \Omega$ ,  $79 \Omega$  and  $92 \Omega$  resistors available. How can she connect the available resistors to get desired value of resistance?
  4. A wire of length 3 m and area of cross-section  $1.7 \times 10^{-6} \text{ m}^2$  has a resistance  $3 \times 10^{-2} \text{ ohm}$ . (a.) What is the formula for resistivity of the wire and what is the unit of it. (b.) Calculate the resistivity of the wire.
  5. An electric bulb draws a current of .8 A and works on 250 V on the average 8 hours a day.
    - a. Find the power consumed by the bulb
    - b. If the electric distribution company charges Rs 5 for 6 KWH, what is the monthly bill for 60 days

## **CHEMISTRY**

➤ **All the practical should be done by using O Lab and students need to maintain records.**

1. A. Finding the pH of the following samples by using pH paper/universal indicator: (Unit-I)

- (i) Dilute Hydrochloric Acid
- (ii) Dilute NaOH solution
- (iii) Dilute Ethanoic Acid solution
- (iv) Lemon juice
- (v) Water

(vi) Dilute Hydrogen Carbonate solution

B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with: (Unit-I)

- a) Litmus solution (Blue/Red)
- b) Zinc metal
- c) Solid sodium carbonate

2. Performing and observing the following reactions and classifying them into: (Unit-I)

A. Combination reaction

B. Decomposition reaction

C. Displacement reaction

D. Double displacement reaction

(i) Action of water on quicklime

(ii) Action of heat on ferrous sulphate crystals

(iii) Iron nails kept in copper sulphate solution

(iv) Reaction between sodium sulphate and barium chloride solutions

3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions: (Unit-I)

(i)  $\text{ZnSO}_4(\text{aq})$

(ii)  $\text{FeSO}_4(\text{aq})$

(iii)  $\text{CuSO}_4(\text{aq})$

(iv)  $\text{Al}_2(\text{SO}_4)_3(\text{aq})$

Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

4. Study of the following properties of acetic acid (ethanoic acid): (Unit- I)

(i) Odour

(ii) solubility in water

(iii) effect on litmus

(iv) reaction with Sodium Hydrogen Carbonate

5. Study of the comparative cleaning capacity of a sample of soap in soft and hard water.

6. Prepare the mind-map of chap: CHEMICAL REACTIONS AND EQUATIONS

## **BIOLOGY**

Using the given link write the practical in the Biology Practical Notebook

<https://tinyurl.com/4a7y2t7j>

1. Studying (a) binary fission in Amoeba and (b) budding in yeast and Hydra with the help of prepared slides.

2. Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean)

3. Preparing a temporary mount of a leaf peel to show stomata.

4. Experimentally show that carbon dioxide is given out during respiration

5. Draw the diagram to show the Digestive system, respiratory system, circulatory system, excretory system and feeding process of amoeba in a A4 size Paper.

6. Plan a model to: increase the efficiency of any machine or transport,

Reduce the global issues, save energy, solve health issues and agricultural problems, etc.  
7. Choose any topic from your NCERT book and make a video while teaching it. Upload the video in the YouTube/ google drive and share the link the link in the class group

### **Social science**

- Prepare a project on any one topic (300-350 words)
  - (i) Consumer awareness
  - (ii) Social Issues
  - (iii) Sustainable Development

**Note:** Follow the following instructions while preparing the project:

1. The Project Report should be handwritten by the students themselves.
  2. If possible, different forms of art may be integrated in the project work.
- Make a project showing consumption and conservation of resources in our country (300-350 words).
  - Imagine if oil supplies get exhausted, how will this affect our life style? Prepare a poster on the same.

### **Art & craft**

**ART-** Draw any two pencil sketches of your choice and give light & shadow effect on them.

Draw two examples of each: - (a) One vanishing point perspective  
(b) Two vanishing point perspective  
(c) Three vanishing point perspective.

Make any nature scene or land scape. (Medium – poster colour, water colour,  
Or collage work.

**CRAFT-** Create a wall art piece using waste material.