



**GANGA INTERNATIONAL SCHOOL
SAWDA**

SUMMER HOLIDAYS

Homework

CLASS X

**GANGA INTERNATIONAL SCHOOL,
SAWDA GHEVRA-NIZAMPUR
ROAD-110081**

Summer Holiday Homework

Dear Students,

Leisure has often been defined as a quality of experience or as free time. Free time is time spent away from business and work, Leisure as an experience usually emphasizes dimensions of perceived freedom and choice. 'Holiday' is but another name for 'Leisure'. Children choose to spend time in company of friends and family and in pursuit of leisurely activities of interest and hobbies. One month and more away from work will cause a setback that may become irreparable. Indeed, to avoid such a consequence a wonderful balance between free time spent with friends, family and the self and studies. This may seem as fun has been snatched away from holidays but when you can make learning fun is when life becomes interesting for knowledge attained from books when fused with knowledge gained from hobbies and frolic is impactful and hence everlasting.

With this aim in mind Holiday Homework has been set to inspire you to explore, engage, act and experience. It will, if done with positivity, enhance the holiday mood for these assignments have an inbuilt experiential quotient, hence is interesting. The life skill that you inadvertently learn through this exercise is balancing work and play and making life more enjoyable.

All the best and happy Holidays!



ENGLISH

(1st week)

1. Make the PROJECT FILE of the following topics.
 - A. DIGITAL INDIA(Roll No. 1 To 10)
 - A. IMPORTANCE OF MEDIA(ROLL No.11 To 20)
 2. Find the meaning of the following words and frame in Sentences of each.
 - Day1- Crest, Delicately, Deny, Solitary and Ox of a man.
 - Day2- Amiable, Plague of locusts, Bunch of crooks, Conscience and Podium.
 - Day3- Jubilant, Overwhelm, Despise, Deprivation and Virtuous.
 - Day4- Prejudice, Oppress, Stalks, Snarl and Fangs.
 - Day5- Stare, Sausage, Bouts, Pathetic and Surge.
 - Day6- Totter, Pant, Wag, Sniff and Compel.
 - Day7- Clasp, Chauffeur, Scar, Drizzle and Damp.
 3. Practise of speaking Tenses' syntax in 1 minute. (SKILL TEST) and send a video on whatsapp.
 4. Share your vacation experience in your diary entry on A4 size sheet.
 5. Find out details of any renowned author and poet and share it on A4 size sheet and prepare a video while telling about it. (You can opt the pattern of an Interview.)
 6. Arrange some different news and creativity and create your own magazine or a small newspaper using scrap book or chart papers. (4-5 pages upto)
 7. Create a one day Or a short part vlog of your daily life in english and record & post.
 8. Create a story using given themes. (1000-1500) words.
 9. Write (50) three forms of verb on a chart or A3 size sheet.
 10. Prepare a model of Punctuation marks and it's uses.
 11. Form or structure the Alphabets in 4-5 different font and style on A3 size sheet.
 12. Make a model of different modal verbs and it's uses.
 13. Watch a web-series LAAKHON ME EK and tell about your favourite character and why? Give reasons.
- Note: Make sure to complete your work on time as you will get internal marks on the timely submission of your hhw. Submit your work in an Folder by writing your name, class, roll number on it.

हिंदी

1. " क्रोध को मानव जीवन के लिए हमेशा गलत बताया गया है, परंतु कभी-कभी जीवन में स्थितियां ऐसी आ जाती हैं क्रोध का अपना महत्व स्पष्ट होता है " इसी कथन को आधार बनाकर क्रोध के पक्ष और विपक्ष में अपने विचार प्रकट करें।
2. व्यक्तिगत उद्देश्य को दर्शाते हुए कोई दो विज्ञापनों के प्रारूप उदाहरण सहित बनाएं।
3. बदलता बचपन, आजादी का अमृत महोत्सव और G 20 इन तीनों विषयों पर निबंध 250 शब्दों में लिखें।
4. अपने नगर की प्रमुख समस्याएं बताते हुए दैनिक समाचार पत्र के संपादक को पत्र लिखें। इसी तरह अपने शहर की नगरपालिका को पत्र लिखें कि आपके शहर में सफाई व्यवस्था चरमरा गई है।
5. पानवाला, बाल गोविंद भगत और नवाब साहब का काल्पनिक अवधारणा मानचित्र बनाएं।
6. हिंदी भाषा के किन्हीं पांच कवियों या लेखकों के चित्र चार्ट पर अंकित करें और उनकी प्रमुख रचनाएं भी लिखें।
7. अपने मोहल्ले की सौंदर्य वृद्धि के लिए आप क्या कदम उठा सकते हैं, कार्य से संबंधित चित्रों का संग्रह भी करें।
8. " मानव जीवन हमेशा कुछ ना कुछ नया करना चाहता है " इन ग्रीष्मकालीन अवकाश के दौरान आपने क्या कुछ नया सीखा? इसकी जानकारी देते हुए एक प्रतिवेदन (रिपोर्ट) तैयार करें।
9. पाठ 1 नेताजी का चश्मा, पाठ 2 बाल गोविंद भगत और पाठ 3 लखनवी अंदाज इनको पुनः स्मरण करके इनके प्रश्न - उत्तर पुस्तिका में लिखें।
10. अपनी मां को मातृ दिवस पर एक शुभ संदेश संचारित करें।
11. BLACK MOVIE की समीक्षा कीजिए और अगर इसका समापन दृश्य बदलने को कहा जाए तो आप इसमें क्या परिवर्तन करेंगे संक्षेप में लिखिए।
12. अंडमान निकोबार की लोक कथाएं पर आधारित परियोजना तैयार करें।

MATHEMATICS

1. Concept Review and Assignment :- Revise Chapters 1 to 5 from NCERT Exemplar in Assignment Register.

2. VERY SHORT TYPE QUESTIONS

- If $\text{LCM}(a, b) = 910$ and $\text{HCF}(a, b) = 2$ where $a = 130$ then find b .
- Find LCM of $(22 \times 3 \times 5)$ and $(24 \times 5 \times 7)$.
- What is the LCM of smallest prime number and smallest composite number?
- How many polynomials can be formed with -2 and 5 as zeroes? Explain.
- Find a quadratic polynomial, sum of whose zeroes is 9 and product is 14

3. Long Ans. Type Questions (Type I)

- Given that $\sqrt{7}$ is irrational, prove that $2 + 3\sqrt{7}$ is irrational.
- If p is prime prove that \sqrt{p} is irrational.
- An army contingent of 200 members is to march behind an army band of 168 members in a parade. The two groups are to march in the same number of columns. What is the maximum numbers of columns in which they can march?
- In a morning walk 3 persons step off together and their steps measure 40cm , 42cm and 45cm respectively. What is the minimum distance each should walk so that each can cover the same distance in complete steps
- If 1 is added to each of the given two numbers, then their ratio is $1:2$. If 5 is subtracted from each of the two numbers, then their ratio is $5:11$. Find the numbers.

4. Long Ans. Type Questions (Type II)

- Find the sum of first 24 terms of an A.P. whose n th term is given by $a_n = 3 + 2n$
- Find a quadratic polynomial whose zeroes are reciprocals of the zeroes of the polynomial $f(x) = ax^2 + bx + c$, $a \neq 0$, $c \neq 0$
- Find the zeroes of the quadratic polynomial $7y^2 - (11/3)y - (2/3)$ and verify the relationship between the zeroes and the coefficients.
- Find the value of k for which the following pair of linear equations has infinitely many solutions: $2x - 3y = 7$, $(k + 1)x + (1 - 2k)y = (5k - 4)$.
- Represent the following situation in the form of quadratic equation : A train travels a distance of 480 km at a uniform speed. If the speed had been 8 km/h less, then it would have taken 3 hours more to cover the same distance. We need to find the speed of the train.

5 Case Based Questions

i. Manpreet Kaur is the national record holder for women in the shot-put discipline. Her throw of 18.86m at the Asian Grand Prix in 2017 is the maximum distance for an Indian female athlete. Keeping her as a role model, Sanjitha is determined to earn gold in Olympics one day. Initially her throw reached 7.56m only. Being an athlete in school, she regularly practiced both in the mornings and in the evenings and was able to improve the distance by 9cm every week. During the special camp for 15 days, she started with 40 throws and every day kept increasing the number of throws by 12 to achieve this remarkable progress.

- How many throws Sanjitha practiced on 11 th day of the camp?
- What would be Sanjitha's throw distance at the end of 6 weeks?
- When will she be able to achieve a throw of 11.16 m?
- How many throws did she do during the entire camp of 15 days ?

ii. To enhance the reading skills of grade X students, the school nominates you and two of your friends to set up a class library. There are two sections- section A and section B of grade X. There are 32 students in section A and 36 students in section B.

- What is the minimum number of books you will acquire for the class library, so that they can be distributed equally among students of Section A or Section B?
- If the product of two positive integers is equal to the product of their HCF and LCM is true then, the HCF $(32, 36)$ is -----
- 36 can be expressed as a product of its primes as -----
- If p and q are positive integers such that $p = a \cdot b \cdot b$ and $q = a \cdot a \cdot b$ where a, b are prime numbers, then find the LCM (p, q)

6. Assertion-and-Reason Type

Each question consists of two statements, namely, Assertion (A) and Reason (R). For selecting the correct answer, use the following code:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of Assertion (A).
- (b) Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of Assertion (A).
- (c) Assertion (A) is true and Reason (R) is false.
- (d) Assertion (A) is false and Reason (R) is true.

1. Assertion: The graph of the linear equations $3x+2y=12$ and $5x-2y=4$ gives a pair of intersecting lines.
Reason: The graph of linear equations $a_1x+b_1y+c_1=0$ and $a_2x+b_2y+c_2=0$ gives a pair of intersecting lines if $a_1/a_2 \neq b_1/b_2$.

2. Assertion: $12n$ ends with the digit zero, where n is any natural number.

Reason: Any number ends with digit zero, if its prime factor is of the form $2m \times 5n$, where m and n are natural numbers.

3. Assertion: If the sum of the zeroes of the quadratic polynomial $x^2-2kx+8$ is 2 then value of k is 1.

Reason: Sum of zeroes of a quadratic polynomial ax^2+bx+c is $-b/a$.

4. Assertion: If one root of the quadratic equation $6x^2 - x - k = 0$ is $2/3$, then the value of k is 2.

Reason: The quadratic equation $ax^2 + bx + c = 0$, $a \neq 0$ has almost two roots.

5. Assertion: Sum of natural number from 1 to 100 is 5050

Reason: Sum of n natural number is $n(n+1)/2$.

7. Maths lab activities related to chapters 1 to 5 are to be completed in Maths Lab Manual.

8. Mathematical Exploration at Jantar Mantar :-

Visit Jantar Mantar physically or virtually using Google Earth and explore the mathematical instruments available there. Gather information about the mathematical principles used in constructing Jantar Mantar. Compile this information on a light green pastel sheet along with pictures and write-ups.

Answer the following questions (based on Mathematics and Mathematical Principle's used):

- i. What is the significance of the name "Jantar Mantar"?
- ii. Evaluate the accuracy of the Samrat Yantra sundial.
- iii. Identify and briefly describe the astronomical instruments at Jantar Mantar.
- iv. Explain the importance of the Ram Yantra.
- v. Describe the functioning of the Jai Prakash Yantra.
- vi. Discuss the purpose of the Chakra Yantra.
- vii. Provide brief explanations of the following mathematical instruments at Jantar Mantar:

(a) Sundials

(b) Astrolabes

(c) Giant Instruments

9. ART INTEGRATED PROJECT:- Ek BHARAT SHRESHTHA BHARAT Programme aims to enhance interaction and mutual understanding of the people of different states or Union territories. Delhi has been paired up with ANDAMAN AND NICOBAR ISLAND/LAKSHADWEEP. So Prepare an art integrated project on the mathematical measurement or structure of any two monuments of ANDAMAN AND NICOBAR ISLAND/LAKSHADWEEP.

10. Make any working Model of any topic of class X Mathematics.

SCIENCE

1. INVESTIGATORY PROJECT

Find out the disease caused by the digestive and respiratory system. Make an investigatory project report.

2. RESEARCH BASED QS

Find out 5 Research based questions from life processes .

3. FACTOGRAPHY

Collect amazing biology facts and Make a file on it.

4. PRACTICAL FILE

Write the following practicals in your Practical File:

- a. Tracing Path of a Ray of Light Passing Through a Glass Slab
- b. Dependence of Potential Difference Across a Resistor on Current with Graph
- c. Determination of Focal Length of Concave Mirror and Convex Lens
- d. Tracing the Path of the Rays of Light Through a Glass Prism
- e. Experimentally Show That Carbon Dioxide Is Given out During Respiration
- f. Identification of the Different Parts of an Embryo of a Dicot Seed
- g. Preparing a Temporary Mount of a Leaf Peel to Show Stomata
- h. Studying Binary Fission in Amoeba and Budding in Yeast with the Help of Prepared Slides
- i. Ph of Samples
- j. Properties of Acids and Base
- k. Reactivity Series Experiment
- l. Types of Reactions Experiment

5. SAMPLE PAPER MAKING

Make a handwritten sample paper which should include 10 MCQs, 3 Assertion-Reasoning, 6 two Marks Qs, 6 three Marks Qs, 3 four Marks Case Based Qs & 3 five Marks Qs across all three Physics, Chemistry & Biology.

6. SCIENCE MODELING

Make a Working 3D Model of any topic of class X science.

7. PERFORM & OBSERVE

Performing and observing the following reactions and classifying them into:

- 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

8. NOTE MAKING

Complete your notes and exercise questions of chapter 1 Chemical Reactions and Equations of the NCERT Science textbook.

9. ART INTEGRATED PROJECT

While making a file use pictures , cutouts, waste materials etc..

TOPIC : ANDAMAN AND NICOBAR (choose only 1 topic)

- Make a project file on medicinal flowers present there.
- Research on Dugong dugon species and why it is used as an official symbol. Write whole details.

(At least 12 pages)

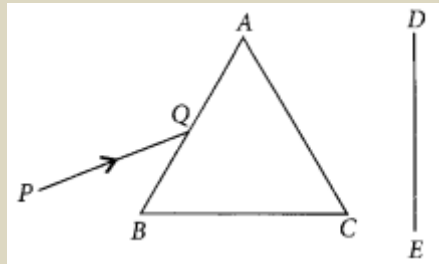
10. ASSIGNMENT

Answer the following questions:

1. With the help of a ray diagram, state what is meant by refraction of light. State Snell's law for refraction of light and also express it mathematically.

The refractive index of air with respect to glass is $\frac{2}{3}$ and the refractive index of water with respect to air is $\frac{4}{3}$. If the speed of light in glass is 2×10^8 m/s, find the speed of light in (a) air, (b) water.

2. One half of a convex lens of focal length 10 cm is covered with a black paper. Can such a lens produce an image of a complete object placed at a distance of 30 cm from the lens? Draw a ray diagram to justify your answer.
3. At what distance from a concave lens of focal length 25 cm a 10 cm tall object be placed so as to obtain its image at 20 cm from the lens. Also calculate the size of the image formed. Draw a ray diagram to justify your answer for the above situation and label it.
4. The absolute refractive indices of glass and water are $\frac{4}{3}$ and $\frac{3}{2}$ respectively. If the speed of light in glass is 2×10^8 m/s, calculate the speed of light in (i) vacuum, (ii) water.
5. An object 4.0 cm in size, is placed 25.0 cm in front of a concave mirror of focal length 15.0 cm.
 (i) At what distance from the mirror should a screen be placed in order to obtain a sharp image?
 (ii) Find the size of the image.
 (iii) Draw a ray diagram to show the formation of the image in this case.
6. A narrow PQ of white light is passing through a glass prism ABC as shown in the diagram. Trace it on your answer sheet and show the path of the emergent beam as observed on the screen DE.



- (i) Write the name and cause of the phenomenon observed.
 (ii) Where else in nature is this phenomenon observed?
 (iii) Based on this observation, state the conclusion which can be drawn about the constituents of white light.

A student is unable to see clearly the words written on the black board placed at a distance of approximately 3 m from him. Name the defect of vision the boy is suffering from. State the possible causes of this defect and explain the method of correcting it.

A person cannot read newspaper placed nearer than 50 cm from his eyes. Name the defect of vision he is suffering from. Draw a ray diagram to illustrate this defect. List its two possible causes. Draw a ray diagram to show how this defect may be corrected using a lens of appropriate focal length.

SOCIAL SCIENCE

1. Collect information about the Lok Sabha election of 2024. Make a list of constituencies of different states and name of the MP and their political party. Get information about the history of elections in India and money spent on every general election. Do comparative study of money spent on different general elections. Make a project/ PPT on the lok sabha election of 2024 according to given topics.

Get information about India and its neighbors and some developed nations like USA, UK, Norway, UAE and some underdeveloped countries like Sudan, Republic of Congo, Chad about their HDI and PCI. Compare the relation between HDI (Human Development Index) and PCI (Per Capita National Income) with the help of suitable graph.

2. Write an article on 'Health and Education are the true indicators of development.'

Make a project on 'Consumer Awareness and rights'

Prepare a Project on the topic: Andaman Nicobar Islands-A Comparative Study (mainly in terms of Location, Formation and Characteristic Features-Use of maps, illustrations, images etc.)

3. Evolution and significance of the symbols associated with India's freedom movement

Do research work on the following topics and prepare a report on A 4 sheets

- Need for symbols in general and during Freedom struggle
- Evolution of the symbols over a period of time. (Any two symbols out of the flag, a song, an object like the Charkha, a khadi, a novel, a place a newspaper like Harijan etc. may be selected).
- The impact of symbols on common people during the course of the freedom movement – how and in what occasions were they used
- How did they help in the making of the Indian nation-did they give a sense of identity?
- What do these symbols mean to you today?
- Design a symbol for 21st century reflecting its nationhood-Explain the symbol.

You may refer to the following websites :

Flag:

http://www.geocities.com/dakshina_kan_pa/art_16/flag1.htm

<http://brilliantignorance.blogspot.com/2005/08/history-of-indian-flag.html>

Sabarmati Ashram:

http://en.wikipedia.org/wiki/Sabarmati_Ashram

<http://www.mk gandhi.org/gandhiyatra/sabarmati.htm>

<http://www.indcast.com/ms/ASHRAM%20HISTORY.htm>

Khadi:

<http://en.wikipedia.org/wiki/Khadi>

<http://www.kvic.org.in/v4/khadi.asp>

4. Prepare a pocket guide on First Aid for your school. The First Aid pocket guide should contain aid that needs to be given for fractures, poisoning, cuts and burns, heat and cold wave and other threats that are prevalent in that area. The content shared in the guide should be supported with adequate pictures so as to give a clear and elaborate understanding about the topic. Choose awareness campaign strategy for either senior citizens or illiterate people and prepare a brief write-up.

5. Make a sample paper of Social science by following CBSE guidelines.

6. Inculcate habit of reading newspaper and make short reports for further reference.(Use A-4 size sheets)

7. Make a PPT .Case study and a 2 pages newsletter on any one topic.(R.NO. wise)

R.No-1 to 5 : ----- Federalism

R.No- 6 to 10 _____ National Political Parties of India

R.NO- 11 to 20 _____ Regional Parties of India

8. Make a Google form from Political science book.Mention 20 MCQ atleast and share link on my gmail- rsingh21379@gmail.com

INFORMATION TECHNOLOGY

1. Digital Storytelling Adventure*: Embark on a captivating digital storytelling adventure and unleash your storytelling prowess in the digital realm. Create a digital story or multimedia presentation using tools like Adobe Spark or Microsoft PowerPoint. Whether it's a futuristic sci-fi tale, a tech-inspired fantasy adventure, or a documentary on emerging technologies.
2. IT Quiz Extravaganza: Test your IT knowledge with an exhilarating IT quiz extravaganza! Create a set of ten challenging IT-related quiz questions covering topics such as computer hardware, software, networking, and internet technologies. Challenge your friends and family to see who can answer the most questions correctly.
3. Learn MCQ of chapter 1(Part A) and (Part B).
4. Make TOC of your IT book index.
5. Make a user define template of Resume.
6. Make a poster on communication cycle.
7. Make a poster on elements of communication.
8. Learn question/answer of chapter-1 of (Part A & B)
9. What could be the barriers in communication. How to remove these barriers.
10. What is the meaning of feedback. What are its types?

NOTE:- Complete all four courses of UNESCO and bring the certificates on first day of joining after summer break.