

JAIN HAPPY SCHOOL

CLASS- X



NOTE: Students are requested to make the working model of different subjects according to the assigned Roll No.

ROLL NO 1 to 14: SCIENCE

Roll No 15 to 28 MATHEMATICS

Roll No 29 to 41 SOCIAL SCIENCE



Let's Learn & Create Together.....

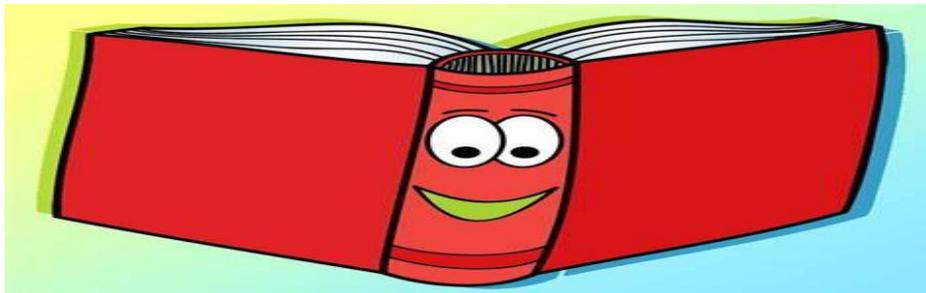
Project Work

1. Design a Book Cover

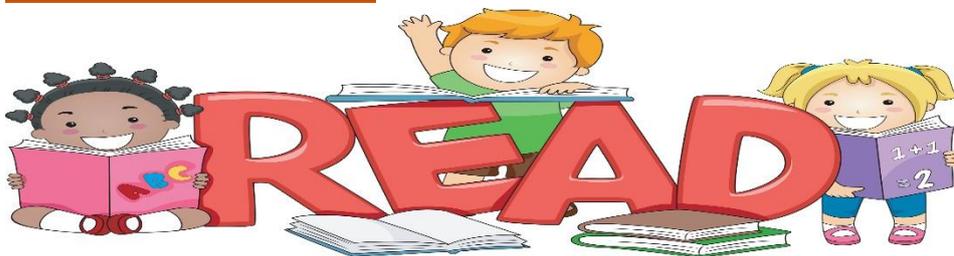
A book cover is a curtain of visual elements- images, typography, and colour. A successful cover design is aesthetically pleasing and has the marketable design. Follow the given steps and design a creative book cover-

- Structure your layout
- Use a compelling image
- Perfect typography
- Refine your colour palette
- Choose a suitable format and size

Read the book- Diary of a Young Girl by Anne Frank and design a book cover for the same.



2. PowerPoint Presentation



Read any book and summarize it in the form of a PowerPoint Presentation. The slides must be in the following order-

- General Information about the book
- Author's Description

| ROLL NUMBER | NAME OF PLACE |
|-------------|---------------------------|
| 1-10 | Lakshadweep |
| 11-20 | Andaman & Nicobar Islands |
| 21-30 | Delhi |
| 31-41 | Lakshadweep |

- Summary
- Moral or your intake from the story.

Note: You can include different pictures related to the text in the slides. Presentation in form of paragraphs will not be accepted.

Number of Slides: 12-15

3. Travel Brochure

Research about places to visit in Lakshadweep and Andaman & Nicobar Islands. Prepare a Travel Brochure of any one place describing the location, ways to reach there, weather, the best time to visit, flora and fauna, food, suggested activities, cultures, etc.

Use pictures, draw borders around the pictures, and give details about the same. There should be interesting and catchy headings above each detailed paragraph.

Each picture in the brochure should have a CAPTION.
Prepare your Travel Brochure as per the following

4. Story Recreation



Recreate the story 'A Letter to God' in your own words keeping yourself in the place of Lencho. You can mould the story accordingly. The task has to be completed in 150 words.

(TO BE DONE IN RULED PUNCHED SHEETS)

5. Writing Skills

Write the letters on ruled punched sheets and submit in a file.

- a. Tourism, one of the biggest and fastest-growing industries globally, affects the nation's economic, socio-cultural, environmental, and educational resources. Improving the tourism industry in India would thus lead to National Development in many spheres. As Ankit/Ankita write a letter to the Editor of The Times of India expressing your views on the same. (100-120 words)
- b. You are the librarian of Delhi Public School, Palam. You are instructed to buy some academic and reference books for the library. While browsing some good publishers over the internet you landed on the website of Oxford University Press, India. Write a letter to Oxford Press, Ghaziabad, placing an order for books. Mention at least 4 titles of the books to be supplied immediately. Address yourself as Kalpana.
- c. You are Shammi/Sapna, a resident of 12 Mall Road, Agra. You have noticed that most of the water taps in your colony keep leaking. Also, water drips from various joints in the supply pipes. All these lead to a big wastage of potable water. Write a letter of complaint to the Municipal Commissioner, Agra Municipal Corporation requesting him to get the necessary repairs done.

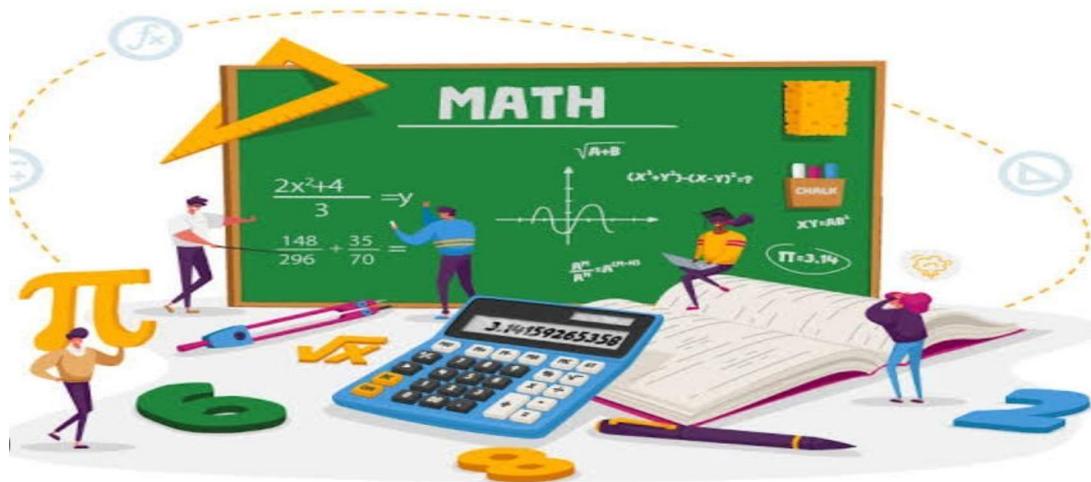
6. From the textbook

Read 1 to 5 of your Supplementary Reader and write the Question Answers of the same in rules sheets and put them in the file.



Submission of Holidays Homework

- Kindly complete the work as directed.
- PowerPoint presentation has to be shared through email.
- Holidays Homework must be submitted on the 1st Monday after vacation. Internal marks are to be awarded according to the work done, presentation and cleanliness,



MATHEMATICS

“ PRACTICE LEADS TO PERFECTION AND PERFECTION LEADS TO SUCCESS ”

DO THE FOLLOWING ACTIVITIES IN THE MATHEMATICS LAB MANUAL

ACTIVITY 1 To verify the graphical solution of a pair of linear equations and verify the nature of its solutions.

| | | |
|-----------------|-----------------|-----------------|
| A) $x + 2y = 4$ | B) $x + 2y = 4$ | C) $x + 2y = 4$ |
| $x - y = 2$ | $2x + 4y = 8$ | $x + 2y = 8$ |

ACTIVITY 2 To verify the Basic Proportionality Theorem/ Thales Theorem.

ACTIVITY 3 To verify by paper cutting and pasting that the given sequence is an arithmetic progression.

ACTIVITY 4 To verify if the corresponding angles of two triangles are equal and their corresponding sides are proportional then two triangles are similar.

ACTIVITY 5 To make a frequency table of the marks obtained out of hundred maximum marks in a mathematics test paper by students of class 10th of a school and find mean, mode and median of their marks by using appropriate method.

ACTIVITY 6 To verify the fundamental identity $\sin^2 \theta + \cos^2 \theta = 1$

ACTIVITY 7 To verify that the sum of first n natural number is $\frac{n(n+1)}{2}$.

ACTIVITY 8 To verify by paper folding cutting and pasting that the lengths of two tangents drawn to a circle from a point outside the circle are equal.

ACTIVITY 9 To find a formula for the volume of a right circular cone by demonstrating that it is one third of the volume of the right circular cylinder with the same radius and the same height.

ACTIVITY 10 To find the sample space of some random experiment such as tossing of one coin, two coin and three coins at a time and finding the probability of an event.

MAKING OF WORKING MODEL

Prepare a working model for the maths exhibition. Make beautiful and colourful charts supporting your model also.

| | |
|----------|--------------|
| Roll no. | Topic |
| 15 to 28 | Trigonometry |

COMPLETION OF ASSIGNMENT

CONTINUOUS AND REGULAR PRACTISE MAKE THE STUDENT PERFECT IN SUBJECT.

Complete the following assignment in your maths register. It will help you in recapitulating concepts done in the class.

CHAPTER 1

REAL NUMBERS

- Given that $\sqrt{3}$ is an irrational then show that $3 - 5\sqrt{3}$ is also irrational.
- Explain why $2 \times 13 \times 5 + 5$ is a composite number.
- State whether $x = 3.3\bar{2} + \frac{5}{3}$ is a rational number or not.
- Using prime factorisation method find the HCF and LCM of 980, 450, 320
- Write a rational and irrational number between 3.47 to 3.82
- In a seminar the number of participants in Hindi, English, Maths are 60, 84, 128 respectively. Find the minimum number of participants to be seated and all of them of the same kind.
- In a school, there are two Sections A and B of class X. There are 40 students in Section A and 60 students in Section B. Determine the least number of books required for the library of the school so that the books can be distributed equally among all students of each Section.
- Find the largest number which exactly divides 280 and 1245 leaving remainders 4 and 3 respectively.
- Without actual division find whether the following have terminating or non terminating decimal representation
 - $\frac{5}{16}$
 - $\frac{35}{126}$
 - $\frac{15}{100}$
 - $\frac{9}{17}$
- A merchant has 105L of oil of one kind and 140L of another and 175L of the third one. He wants to sell the oil by filling the 3 kinds of oils in containers of equal capacity. What should be the greatest capacity of such a container?

CHAPTER 2

POLYNOMIALS

- If the zeroes of the polynomial $x^3 - 3x^2 + x + 1$ are $a - b$, a , $a + b$, then find the value of a and b .
- If one of the zeroes of a quadratic polynomial of the form $x^2 + ax + b$ is the negative of the other, then it
 - has no linear term and the constant term is negative.
 - has no linear term and the constant term is positive.
 - can have a linear term but the constant term is negative.
 - can have a linear term but the constant term is positive.
- $x^2 - ax^3 + bx^2 - cx + 8 = 0$ divided by $(x - 1)$ leaves a remainder of 4, divided by $(x + 1)$ leaves a remainder 3, then $b =$
 - 2.5
 - 5.5
 - 3.5
 - 6.5
- On dividing $x^3 - 3x^2 + x + 2$ by a polynomial $g(x)$, the quotient and remainder were $(x - 2)$ and $(-2x + 4)$ respectively, then $g(x)$ is equal to
 - $x^2 + x + 1$
 - $x^2 + 1$
 - $x^2 - x + 1$
 - $x^2 - 1$
- A child was flying a kite, its string got struck into a tree and touched ground as shown in figure

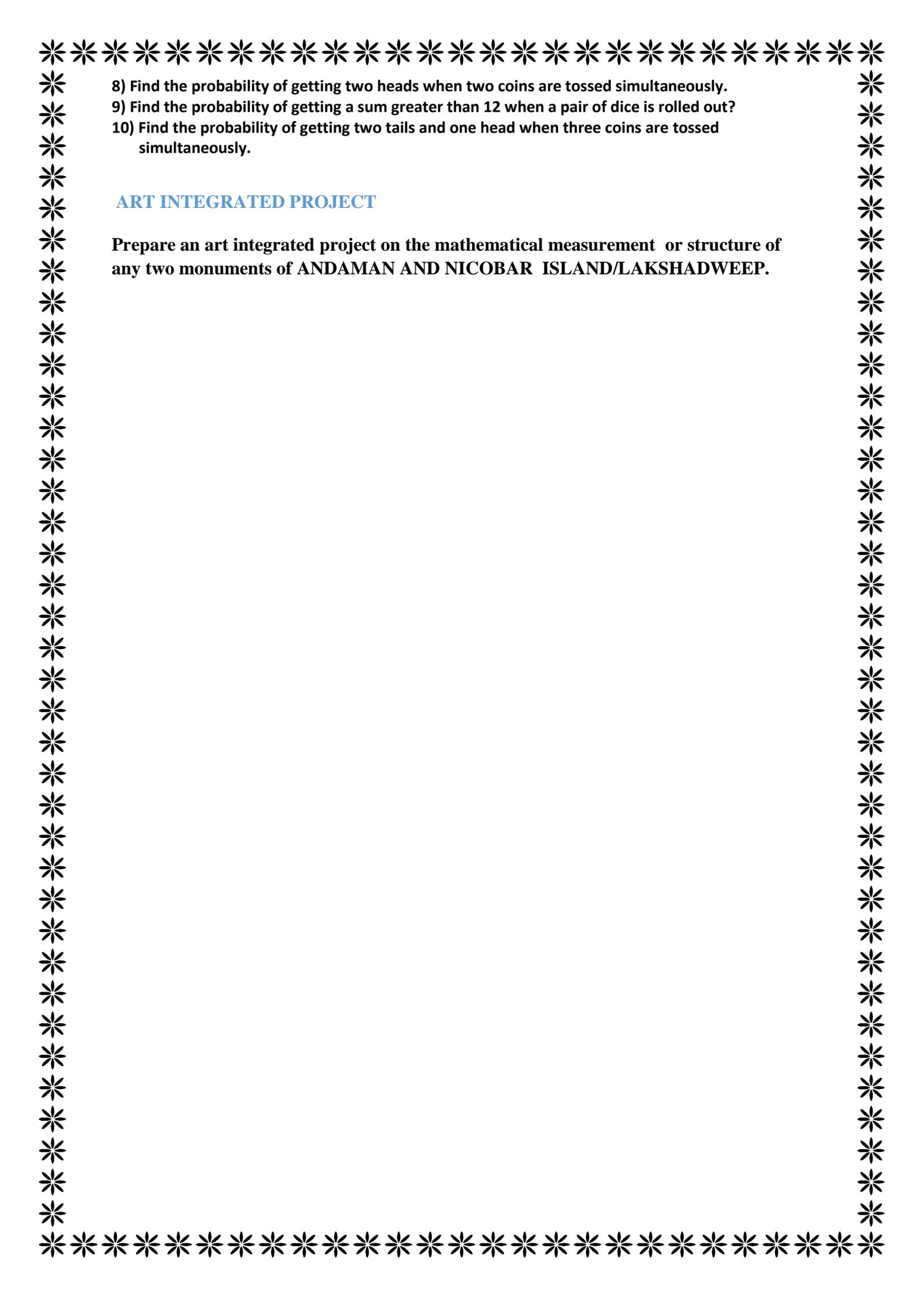


- i. The string of the kite represents the graph of a
 (a) Linear polynomial (b) Quadratic polynomial (c) Cubic polynomial (d) Constant
- ii. The number of zeroes of a quadratic polynomial is
 (a) 1 (b) atmost 2 (c) 3 (d) none of these.
- iii. If the zeroes of polynomial $x^2 - 12x + (3k - 1)$ is five times the other then k is
 (a) 2 (b) 3 (c) 10 (d) 7
- 6) Graph of a quadratic polynomial is _____ in shape
- 7) Find the number of zeroes of the given polynomial $p(x) = (x+1)^2 (x+2)(x-3)$
- 8) If one of the zeroes of the cubic polynomial $ax^3 + bx^2 + cx + d$ is zero, then find the product of the other two zeroes.
- 9) If $x^2 - 5x + 6$ is a quadratic polynomial then find the value of
 i) $\frac{1}{\alpha} + \frac{1}{\beta}$ ii) $\frac{1}{\alpha^2} + \frac{1}{\beta^2}$
- 10) The degree of variables in a cubic equation is _____

CHAPTER 14

PROBABILITY

- 1) On a weekend Ravi was playing cards with her family. The deck has 52 cards. If his brother drew one card then find the probability of getting
- i) a king of red colour
 (a) $\frac{1}{26}$ (b) $\frac{1}{13}$ (c) $\frac{1}{52}$ (d) $\frac{1}{4}$
- ii) a face card
 (a) $\frac{1}{26}$ (b) $\frac{1}{13}$ (c) $\frac{2}{13}$ (d) $\frac{3}{13}$
- iii) a jack of hearts
 (a) $\frac{1}{26}$ (b) $\frac{1}{52}$ (c) $\frac{3}{52}$ (d) $\frac{3}{26}$
- iv) a red face card
 (a) $\frac{3}{26}$ (b) $\frac{1}{13}$ (c) $\frac{1}{52}$ (d) $\frac{1}{4}$
- v) a spade
 (a) $\frac{1}{26}$ (b) $\frac{1}{13}$ (c) $\frac{1}{52}$ (d) $\frac{1}{4}$
- 2) A bag contains 15 white and some black balls. If the probability of drawing a black ball from the bag is thrice that of drawing a white ball, what is the number of blackballs in the bag?
- 3) Two different dice are thrown together. What is the probability that the number obtained have a sum less than 7?
- 4) A dice is rolled twice. What is the probability that 5 will not come up either time?
- 5) A bag contains 25 cards numbered from 1 to 25. A card is drawn at random from the bag. What is the probability that the number on the drawn card is a perfect square number?
- 6) A girl calculates that the probability of her winning the first prize in a lottery is 8%. If 6,000 tickets are sold, how many tickets has she bought?
- 7) Find the probability of getting a doublet when a pair of dice is rolled out?

- 
- 8) Find the probability of getting two heads when two coins are tossed simultaneously.
9) Find the probability of getting a sum greater than 12 when a pair of dice is rolled out?
10) Find the probability of getting two tails and one head when three coins are tossed simultaneously.

ART INTEGRATED PROJECT

Prepare an art integrated project on the mathematical measurement or structure of any two monuments of ANDAMAN AND NICOBAR ISLAND/LAKSHADWEEP.



SCIENCE HOLIDAY HOMEWORK

(1) Draw the neat, clean and colourful following diagrams on A4 sized sheet (one diagram on each sheet):- TOPIC Chloroplast, Human alimentary canal and excretory system , Closed and open stomata, human heart, chloroplast Human excretory system, Human respiratory system and human heart

(2) Explain the function of the following in the scrap copy: (i) Xylem (ii) Phloem (iii) stomata (iv) Digestive enzymes (v) Villi

(3) 4. Read chapter – Life-processes and make 20 questions along with answers (soft copy/hard copy). soft copy should be mailed on the teachers' school id.

(4) Plant a sapling at your home on World Environment day or any other suitable day. Water it regularly and take images of its regular growth. Make a collage of its images(hard copy) Or Take images of plants/trees at your home along with you. Make a collage of those images (hard copy)



(5) Give an example of thermal decomposition and photo decomposition. Also give the reaction involved.

(6) Draw a well labelled schematic diagram of electrolysis of water. Why is the amount of gas collected in one of the test tube in the activity is double the amount of other gas?

(7) What happens when lead nitrate is heated? Page 6 of 8

(8) Name the type of reaction involved. (i) Vegetable matter changing into compost. (ii) Burning of natural gas.

(9) Read the activities given in Ch-1 NCERT and prepare a 4 minutes video on any one activity based on the activities given or any other innovative activity OR Read the topic “How to prepare a natural indicator?”. Then prepare the indicator, make the video of checking acidic and basic substances using that indicator. Send the prepared video on the teachers’ mail id

(10) Read the chapter “Chemical reactions and equations” and “Acids, bases and salts”. Prepare 20 questions along with answers (soft copy/hard copy). soft copy should be mailed on the teachers’ school id.

(11) Write all practical work done in Sc lab in your practical notebook

(12) **ART INTEGRATED PROJECT**

Prepare an agricultural survey of crops in ANDAMAN AND NICOBAR ISLAND OR LAKSHADWEEP. Using tables depict at least five crops giving scientific importance of “How farmers use Science in their day-to-day life”.

(13) **Prepare an exhibit (preferably 3D and working) on the following themes. Roll No 1 to 14 Only**

- A. **Hydraulic machines**
<https://schoolscienceexperiments.com/school-science-projects-hydraulic-lift-model/>
- B. **Robotics**
<https://www.sciencebuddies.org/science-fair-projects/project-ideas/robotics>
- C. **Human biology**

(14) **Science Task 1: Experiential learning** Climate change refers to long-term shifts in temperatures and weather patterns. There is an urgent need to stabilize atmospheric concentrations of greenhouse gases (GHGs). Carbon footprint is the amount of carbon dioxide and Methane gas released into the environment when we use fossil fuels.

- i) Research on various alternative energy sources which have lower carbon footprints.
- ii) Design a prototype or a working model which will help in reducing carbon footprint. Web source: <https://www.futurelearn.com/info/blog/how-to-reduce-your-carbon-footprint-tips> <https://www.weforum.org/agenda/2017/01/tech-innovations-save-us-from-climate-change/>

OR

Task 2: Project report In food production, the use of fertilizers and pesticides is a major contributor to land pollution. Using A 4 sheets, make a project report of four to five sheets, depicting the sustainable methods of food production which not only conserve the natural resources but are also economically efficient.

Web source: <https://ourworldindata.org/environmental-impacts-of-food>
<https://www.foodsystemprimer.org/food-production/food-and-climate-change/>

SUBJECT: SOCIAL SCIENCE

SUBJECT ENRICHMENT PROJECT WORK

Each student will prepare a handwritten project on the following topic with following guidelines:

TOPICS:

1.CONSUMER RIGHTS (ROLL NO-1-14)

2.SOCIAL ISSUES (ROLL NO-15-28)

3.SUSTAINABLE DEVELOPMENT (ROLL NO-29 (ONWARDS))

- **Type of project - Individual Project**
- **-It should be hand- written by the student (no print-outs).**
- **Project should have 18-20 pages (use both the sides of the page)**
- **A-4 size –(one side plain and one side lined or colored sheets, colors, graphs, maps, pictures etc.**
- **Your project should be spiral bound.**

Instructions and guidelines: Project will be developed and presented in the following order:

- 1. Cover Page- It should have - Title of the project and a slogan related to your topic, student's name, Admn. No., Roll no. (Sample below)**

| |
|--|
| <p style="text-align: center;">SCHOOL'S NAME Social Science Subject enrichment project</p> <p style="text-align: center;">Your Title of the project Session 2023-24 (Slogan related to the topic)</p> <p style="text-align: center;">Student's name Class /sec Roll no.</p> |
|--|

2. Index Page - it will contain all the sub- topics of the content

3. Acknowledgement Page - To the institution, teachers, library, places. Visited and the persons who helped them in preparing the project.

4. Content – Content/ main part of the project should include the following:

Under the topic 1. Consumer Awareness,

Students must include a precise report of different laws /consumer rights and acts passed for the protection of consumer rights. How can citizens use these rights? Also suggest ways to improve the system.

Art Integration Activity: Using any one art form, students to integrate the selected topic to create the following:

Make a PAMPHLET on “Consumer Awareness Programme”

Ek Bharat Shrestha Bharat activity: “Andaman & Nicobar Islands”

Prepare a leaflet on how the Indian territory of Andaman & Nicobar Islands is working towards Sustainable Development. Include the following points:

Andaman & Nicobar Islands’s efforts to end plastic pollution

Building green facilities with attention to renewable energy. Organic farming in Andaman & Nicobar Islands.

Under the topic 2. Social Issues

A Students must research on the varied Social Issues prevailing in our society e.g. Gender Discrimination, Communalism, unemployment, poverty, female foeticide etc. include a precise report on different measures adopted by government against various social issues. Student should also give their suggestions /ideas/opinions for the removal of all social evils from the Indian society.

B. Art Integration Activity: Using any one art form, students to integrate the selected topic to create the following-

For school magazine make CARICATURES on any one social evil prevalent in Indian society.

C. Ek Bharat Shrestha Bharat activity: "SUSTAINABLE Andaman & Nicobar Islands"

Prepare a leaflet on how the Indian territory of Andaman & Nicobar Islands is working towards sustainable development. Include the following points:

Andaman & Nicobar Islands's efforts to end plastic pollution

Building green facilities with attention to renewable energy. Organic farming in Andaman & Nicobar Islands.

Under the topic 3. Sustainable Development

A Students must include the methods and ways to incorporate and implement the principles of sustainable development in our day-to-day life. Research and mention government plans towards sustainable development. Suggest innovative ways for Sustainable development.

B Art integration activity: Using any one art form, students to integrate the topic to create the following:

By imagining as a member of school cultural society, prepare an INVITE (pictorial) for a

"QUIZ" to be conducted by school on-"Sustainable Development: Need of the Hour"

C Ek Bharat Shrestha Bharat activity: "SUSTAINABLE Andaman & Nicobar Islands"

Prepare a leaflet on how the Andaman & Nicobar Islands is working towards sustainable development. Include the following points:

Andaman & Nicobar Islands's efforts to end plastic pollution

Building green facilities with attention to renewable energy, Organic farming in Andaman & Nicobar Islands.

➤ LEARN ALL LESSONS DONE SO FAR

**SOCIAL SCIENCE WORKING MODEL – Any One Of the following
(Roll no 29 to 41)**

MODES OF COMMUNICATIONS

NATURAL DISASTERS AND MANAGEMENT

SUSTAINABLE DEVELOPMENT

SPRINKLE IRRIGATION

WORKING MODEL OF DAM

BAMBOO DRIP IRRIGATION

Computer Holiday Homework

Class X

- ❖ Learn and Revise All the Work Done in the Class
- ❖ Make a Beautiful chart as per your roll no .Topics
- ❖ Roll no – 1 to 10 – internet Basic
- ❖ Roll no -11 to 20 – Cyber Ethics
- ❖ Roll no -21 to 30 – HTML
- ❖ Roll no -31 to 41 -Cyber Ethics
- ❖ Write a Basic HTML structure on notepad and take input and output screenshot printout on computer Registers



CLASS X PHYSICAL EDUCATION HHW (2023-24)

1. Learn and revise the work of L1 & L2 done in the class.
2. Make a stationary, working or 3D models on the following topics according to your roll no.

- ROLL NO. 1 TO 10 – CRICKET STADIUM
- ROLL NO. 11 TO 20 – FOOTBALL GROUND
- ROLL NO. 21 TO 30 – BASKETBALL COURT
- ROLL NO. 31 TO 41 – KHO-KHO COURT

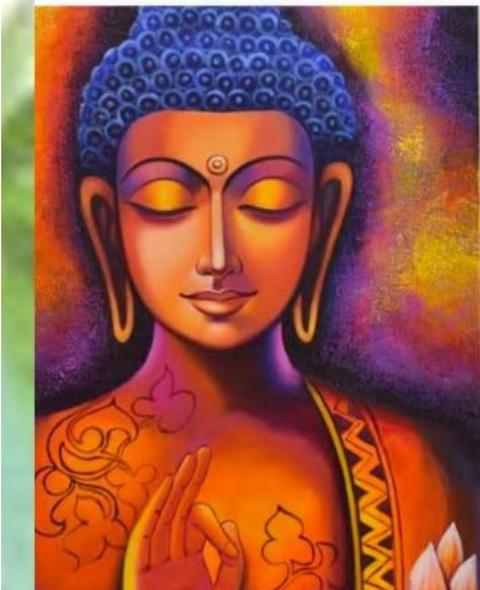
SAMPLE MODELS -



Art and craft



Craft- make this beautiful welcome hanging , use thick card board to make it.Colour it with attractive fabric paints.



Art: Make a beautiful painting on the theme of "Buddha with lotus ". Colour the painting with attractive Colours.



Let's talk about MUSIC



Conversation cards

| | | |
|---|---|--|
| What's your favourite kind of music? | Can you play a musical instrument? If so, which one? | How often do you listen to music? |
| Have you ever been to a concert or live show? Talk about it. | Have you ever sung karaoke? Did you like it? | Do you like to sing? Why (not)? |
| How many CDs do you have? What's your favourite? | Do you have an MP3-player? How often do you use it? | Have you ever downloaded music from the Internet? Why? |
| Do you prefer music in English or in your own language? Why? | Which musician or band would you most like to meet? Why? | Do you ever listen to loud music? When? |
| Can you dance? What's your favourite dance? | Do you listen to music on the radio? What's your favourite radio station? | When you listen to music, do you try to understand the words (lyrics)? |
| Would you like to be a famous singer? Why? | What's your favourite singer? Why do you like him or her? | What's your favourite band? Why do you like it? |

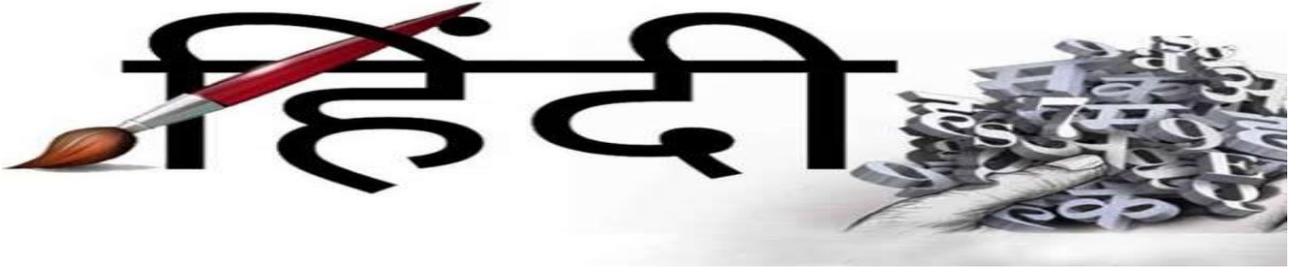
Tick the music you like

| | |
|----------------|--|
| classical | |
| easy listening | |
| heavy metal | |
| hip hop | |
| jazz | |
| R&B | |
| rap | |
| rock | |
| salsa | |
| traditional | |



Match instruments and pictures

| | |
|-----------|------------|
| accordion | piano |
| drums | saxophone |
| flute | tambourine |
| guitar | triangle |
| harmonica | trumpet |
| organ | violin |



हिन्दी-ग्रीष्मकालीन गृहकार्य

1. मौलिक व स्वरचित एक हिन्दी कविता व एक हिन्दी कहानी लिखे व याद करें । (कविता 1- 3 मिनट व कहानी 2-3 मिनट)
2. आपकी छुट्टियों के केवल 10 दिनों की डायरी हिन्दी में लिखिए।
- 3 रचनात्मक अनुच्छेद लिखें – क) - भारत के विकास में युवाओं का योगदान
ख) - G-20 से भारतीय भाषाओं का महत्त्व
- 4 निम्न फिल्म देखकर उनसे मिलने वाली 5 शिक्षाएं लिखिए –
- <https://youtu.be/gZy4vIGf7MY>
(I am Kalam)
- 5 . हिन्दी भाषा के महत्व पर जागरूता विज्ञापन का मॉडल तैयार कीजिए।
6. लक्षद्वीप एवं अंडमान निकोबार द्वीप की भाषा, कला ,साहित्य, संस्कृति व भौगोलिक स्थिति के विषय में बताते हुए एक प्रोजेक्ट तैयार करें । (पी.पी.टी.)



कक्षा - दसवीं

संस्कृत

1. समास के 10-10 उदाहरण लिखें ।
2. संख्यावाची शब्द लिखकर याद करें ।
(1से100 तक)
3. पाठ्यक्रमानुसार शब्द व धातु रूप लिखकर याद करें।
- 4 संस्कृत भाषा से सम्बंधित एक गीत लिखकर याद करें। व इस वीडियो को देखकर संस्कृत में सम्वाद तैयार करें ।

<https://youtu.be/OV2L8gdl6g4>

- 5 निम्न विषय पर कोई एक सुन्दर प्रोजेक्ट चित्र सहित तैयार करें --- श्रीमद् भगवद्गीता , महाकवि कालिदास , वेद , रामायण आदि ।

- 6 लक्षद्वीप एवं अंडमान निकोबार द्वीप की भाषा मे संस्कृत भाषा के प्रचारक कवि व लेखकों के योगदान की एक प्रोजेक्ट फाइल तैयार करें।

