

**Vacation-** “The bridge between the adventures of the mind and the joys of discovery.”





## HINDI

नोट - सभी कार्य स्क्रेब बुक में करना है।

1 निम्नलिखित बिन्दुओं के आधार उत्तर प्रदेश राज्य की सांस्कृतिक, भौगोलिक, वहाँ का खान-पान व वेश भूषा का चित्र सहित एक परियोजना तैयार कीजिए।

विषयसूची, प्रस्तावना, प्रमाण पत्र

2 'गिल्लू' कहानी को पढ़कर पाठ का सार चित्र सहित लिखिए।

3 निम्नलिखित भाव को पाठ में किन पंक्तियों द्वारा अभिव्यक्त किया गया है -

क - 'अपनी संपत्ति ही दुःख में काम आती है।'

ख - 'कोई लाख कोशिश करे पर बिगड़ी बात फिर बन नहीं सकती।'

ग - 'बड़े को देख कर छोटे को नहीं त्यागना चाहिए।'

घ - 'अपने मन के दुःख को मन में ही दबाकर रखना चाहिए।'

ड - इस संसार में धनी कौन है।'

4 - संकेत बिंदुओं के आधार पर निम्नलिखित विषय पर अनुच्छेद लिखिए -

क - मेरा भारत महान -

विश्व गुरु भारत , समृद्ध सांस्कृतिक परंपरा , वर्तमान दशा , विकास के पथ पर

ख- जीवन में खेल कूद का महत्त्व

स्वस्थ शरीर से कर्तव्य पालन संभव, व्यायाम, मनोरंजन, खेल से संकुचित मानसिकता का समापन, विद्यार्थियों का सर्वांगीण विकास।

## MATHEMATICS

1. Make a project file of at least 15 pages on "Art integrated project based on Ladakh" which should include

- (i) Cover page      (ii) Index page      (iii) Brief introduction of topic      (iv) Bibliography

2. Assignment Ch -1 Number System  
Ch-2 Polynomials

## SCIENCE

### MATTER

The matter is defined as anything that has mass and volume. Atoms are smallest unit of matter. This means that atoms are building blocks of all other substances on earth -both organic and inorganic.



**Activity1** -Do detailed research on the following:

- ROLL NO 1 TO 5: Stability and existence of particles like atoms, molecule and compounds in nature (Octet concept)
- ROLL NO 6 TO 11: Research on the BOSE EINSTEIN CONDENSATE AND PLASMA States of matter stating their practical application.
- Roll no 12 to 18: Ease of reactivity of elements (Clue-Reactivity series)
- Roll no 19 to 24: Presentation of any element (Dalton's...IUPAC Format)
- Roll no 25 to 30: Detailed research on the different model of atomic structure (with diagram)
- Roll no 31 to 35: Read about at least five scientists and their contribution in science and write at least 50 words on each scientist.

Learning outcomes: Research skills, critical thinking skills, presentation skills and drawing skills

**Activity 2: Assignment**

Q1. Account for the following

- Dogs generally hang out their tongue in summer.
- Smell of lighted incense sticks spreads several meters away.
- Sponge though compressible is a solid.

Q2. Water as ice has a cooling effect whereas water as steam may causes burns. Explain these observations.

Q3. Discuss the effect of increasing temperature and pressure on the liquid state of a substance. Are these effects similar? If not assign reason.

Q4. 5ml of water was taken in a test tube and china dish separately, these samples were then kept under different conditions as below:

- Both the samples are kept under a fan
- Both the samples are kept inside a cupboard

a) State in which case evaporation will be faster? Give reason.

b) How will the rate of evaporation change if above activity is carried out on a rainy day?

Q5. Explain how will you separate Ammonium chloride and common salt using sublimation.

Q6. Write an activity to prove that liquids of different densities diffuse at different states.

Q7. All of us are familiar with LPG cooking gas cylinder used at home

- What is the full form of LPG?
- What is it composed of?
- In what form gas is stored? What are the factors responsible for it?
- What is the change observed when regulator is opened? Why?

Q8. Convert:

- 5 degree Celsius to kelvin
- 345K to degree Celsius

Please Note: The presentation of the project (Activity 1) should be in a folder and assignment should be in Notebook.

## FUNDAMENTAL UNIT OF LIFE

### CELL



Living being is formed by small units which are called as cells. Each cell is complete in itself. In unicellular organisms they function freely the different and various activities but in multicellular organisms they control the activities combinable. Each cell has a cell membrane which covers its protoplasm.

**Activity 1** -Make an "Art Integrated Project" on the theme- Arunachal Pradesh.

Following aspects can be covered in your project:

- Flora and fauna
- Weather conditions
- Technological advancements done till now
- Environmental threats in that region
- Any other scientific development in that area

You can use your creativity and paste colorful pictures , drawings, paintings in making your project.

**Learning outcomes: Research skills, critical thinking skills, presentation skills and drawing skills**

**Activity 2:** Assignment

Q1.Why is endocytosis found in animals only?

Q2.In brief state what happens when:

(a) Dry apricots are left for sometime in pure water and later transferred to sugar solution?

(b) A red blood cell is kept in concentrated saline solution?

(c) The plasma membrane of a cell breaks down?

(d) Rheo leaves are boiled in water first and then a drop of sugar syrup is put on it?

(e) Golgi apparatus is removed from the cell?

Q3.Why were the scientists not able to observe most of the cell organelles before 1940?

Q4.There would be no plant life if chloroplasts did not exist. Justify.

Q5.Why is the Golgi apparatus called the secretary organelle of the cell?

Q6.What is cell sap? Give its composition.

Q7.Why do the animal cells not have cell wall?

Q8.Why are the Golgi bodies found in large numbers in the cells which secrete digestive enzymes?

Q9.What is the significance of pores present on the nuclear membrane?

Q10.How are chromatin, chromatid and chromosomes related to each other?

**Please Note:** The presentation of the project (Activity 1) should be in a folder and assignment should be in Notebook.

## **PHYSICS**

**Project work:**

Q1. With reference to the content given in NCERT, find out what are the three laws of motion? Give examples showing applicability of the laws of physics in everyday life situations. Make a project file on how physics is involved in sports, dance and sound of various musical instruments.

Q2. Make a 7 Layer Density tower using your favorite Liquids/solids. Share your experience using photographs. (b) How do you think the density of liquids will change if you increase their concentration? Form a hypothesis and design an experiment to investigate the research question. Your research should be written in A4 sheet for at least 4 pages with photographs.

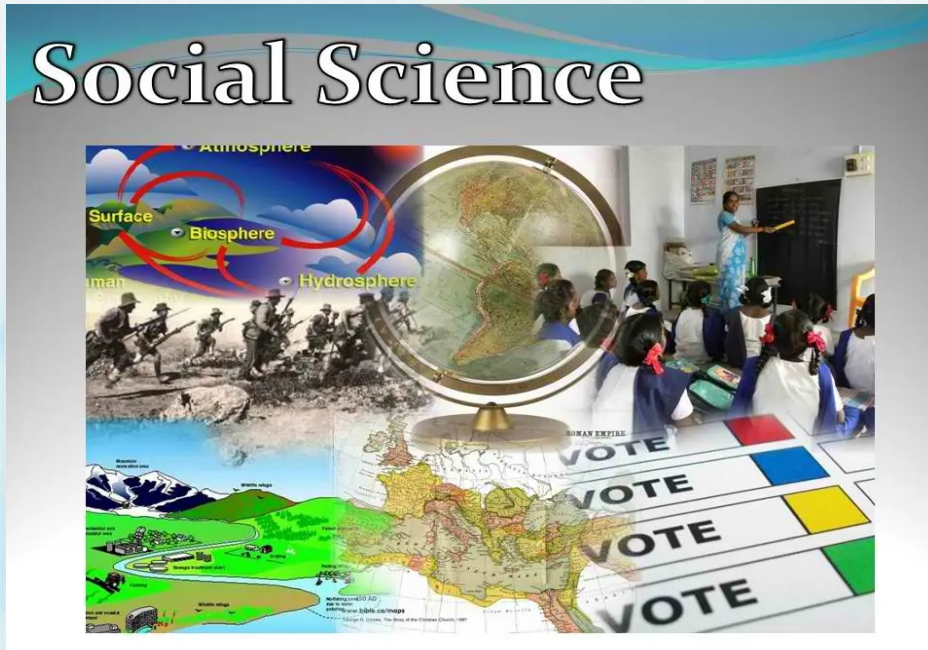
Q3. Plan to go to a place by a vehicle. Take readings of odometer and speedometer after every 5 minutes till you reach your destination. Record these observations in tabular form; plot graphs between distance-time and speed time. State whether this motion is uniform or non-uniform. Do this activity in your fair copy through graph paper.

### Worksheet

Answer the following questions in your fair notebook:

- 1 What is the acceleration of a body moving with uniform velocity?
- 2 What does the slope of a distance-time graph gives?
- 3 Can displacement be zero even when distance is not zero? Give Example.
- 4 How can you get speed of an object from its distance – time graph?
- 5 How can you get distance of an object from its speed – time graph?
- 6 Can a body have zero velocity and still acceleration? Give example.
- 7 Is it possible in straight line motion a particle having zero speed and a nonzero velocity? Explain.
8. On a 60 km straight road, a bus travels the first 30 km with a uniform speed of 30  $\text{kmh}^{-1}$ . How fast must the bus travel the next 30 km so as to have average speed of 40  $\text{kmh}^{-1}$  for the entire trip?
9. A driver takes 0.20 seconds to apply the brakes. If he is driving car at a speed of 54  $\text{kmh}^{-1}$  and the brakes cause a deceleration of 6.0  $\text{ms}^{-2}$ . Find the distance travelled by the car after he sees the need to put the brakes.
10. A ball thrown vertically upwards with a speed of 19.6  $\text{ms}^{-1}$  from the top of a tower returns to the earth in 6 seconds. Find the height of the tower. ( $g = 9.8 \text{ ms}^{-2}$ )
11. A bullet initially moving with a velocity of 20  $\text{m/s}$  strikes a target and comes to rest after penetrating a distance of 0.01  $\text{m}$  in the target. Calculate the retardation produced by the target.
12. A body moving in a straight line at 72  $\text{kmph}$  undergoes an acceleration of 4  $\text{m/s}^2$ . Find its speed after 2 seconds.

## SOCIAL SCIENCE



### History

#### Chapter-1 The French Revolution

i) Draw on chart paper or make model all the symbols that conveyed the content of the Declaration of Right. Also write about these symbols in brief.

(Take help from NCERT book - India and the contemporary world-1, page no.12 &13)

ii) Learn and revise chapter 1 The French Revolution (Given notes & assignment)

### Political Science:

i) Write the Preamble of any three different democratic countries on a chart paper.

ii) 2) On the world map, shade the countries which became Democracies between

1) 1900-1970

2) 1970-1980

3) 1980-2000

Note-Use different colours for shading. E: g 1900-1970 (red ) 1970-1980 (yellow ) 1980-2000 (green ) also mention names of countries.



### **Geography:**

1) Make a model on the Physical Features of India.

2) Map work-Locate & label the following on the map of India.

a) Mountain & hill Range: The Karakoram, the Zaskar, the Shiwalik, The Aravali, the Vindhya, the Satpura, the Patkai Bum, the Jaintia, Western & Eastern Ghats.

b) Mountain Peaks: K2, Kanchenjunga, Anai Mudi.

c) Plateau: Deccan Plateau, Chota Nagpur Plateau, Malwa Plateau.

d) Coastal Plains: Konkan, Malabar, Coromandel and Northern Circar

e) The Indian Desert

(Take help from the NCERT book Geography Contemporary India-1, Page no.9&10)

3) Learn & Revise chapter -1 India Size & Location

### **Disaster Management**

\*Every student has to compulsorily undertake any **one** project out of the given topics from Disaster Management.

\*Choose any man-made or natural disaster to which India is vulnerable to e.g, building collapse, terrorist attack, earthquakes, cyclones, landslides, floods, etc.

\*Prepare a detailed project under the following heads: Meaning of Disaster, Hazard, the difference between Hazard & Disaster, Disaster Management, and the various causes and mitigation measures of the disaster chosen by you.

\*Your project should be supported by suitable photographs and paper cuttings of the affected area.

\*Collect the data and prepare a report on any one of the recent disasters that has taken place in the country (last two years) Define the role of citizens, NGOs, and government agencies during disasters.

\*Students need to prepare their project on A4 size paper, which should be handwritten. The project should consist maximum of 8 pages. (Cover Page: Title, Topic/ Name of The Student/ Class/Section/Scholar Number) should be mentioned in the project.

## ARTIFICIAL INTELLIGENCE

The latest initiative aimed at transforming urban living through the power of artificial intelligence. Our Smart City Project seeks to revolutionize various aspects of urban life, making cities more efficient, sustainable, and responsive to the needs of their inhabitants. We will harness the capabilities of AI to address key challenges faced by modern cities, including traffic congestion, energy consumption, waste management, public safety, and more. By deploying advanced AI algorithms and cutting-edge technologies, we aim to create intelligent systems that optimize resource allocation, improve infrastructure, and enhance the overall quality of life for urban residents.

### **Project:**

Create a Flip Book where you all put your own innovative ideas through which you can create a Smart City.

### **Guidelines:**

1. Create a word / html file where you put your ideas of Smart City with the help of images and smart write ups.
2. Convert it to a flip book with any free online tool available.
3. You can take the help of internet to search for the already smart cities in India and take your idea from there.
4. Brainstorm your creative and scientific mind to think of the smart city where you may like to reside in 2050 and design your flipbook accordingly.

## FRENCH

1. Décrivez votre journée sur une feuille de format A-4
2. Complete the given worksheet in your note book

## ART

1. Make two stillife showing the importance of light and shadow A3 size only.
2. Make a landscape in A3 size with pencil shading.
3. Draw a portrait of any person of your choice with pencil.
4. Make a warli painting with poster colour on A3 size paper only.
5. Make a Madhubani painting with poster colour on A3 size paper only.
6. Make a landscape painting using any colour medium in A3 size.

HAVE A GREAT **SUMMER** VACATION!



THANK **YOU!**