

ST. MARGARET SR. SEC. SCHOOL D-Block, Prashant Vihar, Rohini, Delhi - 110085 HOLIDAY HOMEWORK 2025-26 CLASS: IX



#### ENGLISH

Update yourself with the current events by reading the newspaper daily.

Enhance your vocabulary by conversing in English with your friends and family.

Revise all the work done till date.

**Design an Advertisement on a School Initiative** 

- Select any one of your school's initiatives (refer to the school almanac).
- Create an eye-catching advertisement on an A4 size sheet (front and back).
- Include the following:
  - A catchy slogan.
  - A brief description of the initiative.
  - Draw or paste relevant pictures to make it visually appealing.
  - Spread awareness about the initiative and encourage others to support it.

## Read and Explore: Mind Mapping

- Carefully read Unit 1: People, Unit 2: Adventure, and Unit 3: Environment of your Main Course Book. Choose any two of these units and create a mind map for each on A4 sheets.
- Your mind maps should highlight the following:
  - Key themes or characteristics.
  - Problems and challenges mentioned.
  - Solutions or ideas shared and important learnings or messages.

#### HINDI

- समाचार पत्र तथा अन्य पत्र पत्रिकाओं का प्रतिदिन वाचन करते हुए अपने शब्द भंडार और वाचन क्षमता का विकास करें।
- संचयन भाग 1 से पाठ 2 स्मृति का स्ववाचन करते हुए पाठ का सार अपने शब्दों में हिंदी रजिस्टर में लिखिए।
- अंडमान-निकोबार द्वीप समूह की जीवन शैली तथा हिंदी साहित्य के बारे में जानकारी प्राप्त करते हुए A3 सीट पर कोलाज बनाते हुए 80 से 100 शब्दों में संक्षिप्त जानकारी दीजिए।
- 4. उपसर्ग-प्रत्यय अथवा विराम चिह्न के भेदों का विवरण व्याकरण वृक्ष द्वारा 🗛 सीट पर बनाइए।
- 5. साहित्य और व्याकरण के पठित पाठों को असाइनमेंट बुकलेट में पूरा करते हुए पुनरावृति करिए।

6. विद्यालय द्वारा चलाए गए अभियान 'पौधार्पण : जीवन समर्पण' विषय पर एक आकर्षक विज्ञापन हिंदी रजिस्टर में बनाइए।

## SANSKRIT

# १. अध्यापितेषु सर्वेषु पाठेषु पुनरावृत्तिं कुरुत।

२. Assignment पुस्तिकायाः साहाय्येन अपठितगद्यांशस्य, चित्रवर्णनस्य, पत्रलेखनस्य च अन्येषां व्याकरणसम्बन्धिनां कार्याणां अभ्यासं कुरुत।

३. स्वविद्यालयसम्बन्धितां आवश्यकां जानकारीं संगृह्य एकं पोर्टफोलियो निर्मायताम्। तस्मिन् एकं शीर्षकं लिखित्वा संस्कृतेन पञ्च वाक्यानि लिखत (A4 आकारे पत्रे)।

४. कस्यापि प्राकृतिकस्य वा पर्वतीयस्थलस्य यात्रा कुर्वन्तु। तत्सम्बन्धीनि चित्राणि A4 आकारे पत्रे लिखित्वा वा आरोप्य तस्मिन् विषये संस्कृतेन पञ्च वाक्यानि लिखत।

1. पढ़ाए गए सभी पाठों की सोभ्यास पुनरावृत्ति कीजिए।

2. Assignment बुकलेट से अपठित गद्यांश, चित्रवर्णन, पत्रलेखन एवं अन्य व्याकरणिक कार्य का अभ्यास कीजिए।

3. अपने विद्यालय से सम्बन्धित आवश्यक जानकारी एकत्रित करके एक पोर्टफ़ोलियो बनाइए और उसका एक शीर्षक देकर उस पर संस्कृत में पाँच वाक्य लिखिए।(A4 size sheet पर)

4. किसी भी प्राकृतिक/पर्वतीय स्थल की यात्रा कीजिए तथा उससे संबंधित चित्र A4 size sheet पर बनाकर/चिपकाकर उस विषय पर संस्कृत में पाँच वाक्य लिखिए।

#### MATHS

**PORTFOLIO : Write identities on A4 size sheet and create any picture of it.** 

ART INTEGRATED PROJECT: Make a project on Andaman and Nicobar (6 to 8) pages including data and various suitable graphs to show religions, languages, population, agriculture ,temperature .

**REVISION :** Do questions from Assignment Booklet and Exemplar in separate notebook of chapters \_ Herons formula, Number system, Polynomials

#### SCIENCE

## PHYSICS

1.Make a **mini project** in A4 sheet on the topic "Applications of Motion in Daily Life" (e.g., sports, transportation, amusement parks).(not more than 3 pages)

2. Do the following questions in your physics register.

- Q.1. A train travels some distance with a speed of 30km/hr and returns with a speed of 45km/hr. Calculate the average speed of the train.
- Q.2. A train 100m long moving on a straight level track passes a pole in 5s. Find (a) the speed of the train
  - (b) the time it will take to cross a bridge 500m long.
- Q.3. A particle is moving in a circle of diameter 5m. Calculate the distance covered and the displacement when it competes 3 revolutions.
- Q.4. A body travels a distance of 15m from A to B and then moves a distance of 20m at right angles to AB. Calculate the total distance travelled and the displacement.
- Q.5. Starting from a stationary position, Bhuvan paddles his bicycle to attain a velocity of 6m/s in 30s. Then he applies brakes such that the velocity of bicycle comes down to 4m/s in the next 5s. Calculate the acceleration of the bicycle in both the cases.
- Q.6. The odometer of a car reads 2000 km at the start of a trip and 2400km at the end of the trip. If the trip took 8 hr, calculate the average speed of the car in km/hr and m/s.
- Q.7. A motor cycle moving with a speed of 5 m/s is subjected to an acceleration of 0.2 m/s<sup>2</sup>. Calculate the speed of the motor cycle after 10 seconds and the distance travelled in this time.
- Q.8. The brakes applied to a car produce an acceleration of 6 m/s<sup>2</sup> in the opposite direction to the motion. If the car takes 2 seconds to stop after the application of brakes, calculate the distance it travels during this time.
- Q9.Two cars A and B race each other. The Car A ran for 2 minute at a speed of 7.5 km/h, slept for 56 minute and again ran for 2 minute at a speed of 7.5 km/h. find the average speed of the car A in the race.
- Q.10Anand leaves his house at 8.30 A.M for his school. The school is 2 km away and classes start at 9.00 A.M. If he walks at a speed of 3 km/h for the first kilometre, at what speed should he walk the second kilometre to reach just in time?

#### Biology

- Prepare a project file of biology (7 -8 pages), topic 'The fundamental unit of life'.Paste pictures of scientists involved in discovery of "Cell". And write their functions.
- Do the following questions in your register.
- 1. Name the cell without membrane bound nucleus.
- 2. What are membranes bound structures in a cell called?
- 3. Name the functional segment of DNA that carries genetic information.

- 4. Where are proteins synthesized inside the cell?
- 5. Mitochondria is called the power house of the cell. Give reason.
- 6. What is Chromatin material and how does it change just before the cell division?
- 7. Nucleus is called the director of the cell. Justify the statement giving reasons.
- 8. Give four differences between prokaryotic and eukaryotic cells.
- 9. What is the meaning of division of labour? Is it different from cell to cell?
- 10. Draw the nucleus of a cell and label the:
- a) Double layered structure which encloses the nucleus.
- b) Visible entangled mass of thread like structures.
- c) A darkly stained round structure inside the nucleus.
- 11. What does DNA molecule contain?
- 12. Give one difference between cytoplasm and nucleoplasm.
- 13. In what two ways osmosis is different from diffusion.
- 14. What will happen when:
- a) Dry apricots are left for some time in pure water and later transferred to sugar solution?
- b) A red blood cell is kept in concentrated saline solution.
- c) Rheo leaves are boiled in water first and then is placed in the sugar syrup.

15. Look at the figure:



a) Name the process.

b) Identify the organism shown in the figure.

c) It shows the nature of cell membrane as : (rigid/flexible). Explain the role of cell membrane undergoing this process.

#### Chemistry

- 1. Make a project on any one of the following
  - a) Panch Tatva
  - b) Physical Nature of Matter
  - c) What led scientists to evolve the concept of atom?

Instructions

- Must be submitted in a leaf file.
- Minimum number of pages -3
- 2. What happens when an inflated air balloon is pricked with a pin? Name the property of the gaseous state exhibited by this observation.
- 3. Name the state of matter in which:
  - (i) Layers of particles can slip and slide over one another easily.
  - (ii) Particles just move around randomly because of very weak force of attraction.
- 4. In which of the following, the particles have highest forces of attraction?

Water, NaCl (solid), ice or, wax.

- 5. Can materials exist in all the three states? Explain
- 6. Kinetic energy of particles of water in three vessels A, B and C are EA, EB and EC respectively and EA > EB > EC. Arrange the temperatures, TA, TB and TC of water in the three vessels in increasing order.
- 7. Analyse the temperature versus time graph of water, given below.



Which region contains all liquids?

8. Why do solids have a regular geometrical shape?

#### SOCIAL STUDIES

1. Prepare a badge on the topic: Fighting Plastic Pollution

Instructions:

\*Give the heading to your badge - "Sustainability Sentinel"

\*Use cardboard for the base of the badge.

\*Use eco-friendly materials such as recycled paper, fabric, or biodegradable alternatives.

\*Ensure the design reflects the theme of banning plastic usage and promotes ecofriendly practices.

\*Use of slogan is compulsory.

\* The size of the badge should be about 4 inches in diameter.

2. History-Geography Interdisciplinary project

Prepare an interdisciplinary project based on Forests and wildlife.

The project is divided into Geography, History.

Students will conduct research and do the written part of the integrated project on the given topic.

Geography-. Discuss the characteristics of tropical evergreen forests, including their climate, soil, and flora/fauna. Students will research specific examples of tropical evergreen forests and the challenges they face, such as deforestation and climate change in Andaman and Nicobar Islands.

Instructions:

\*The word limit is about 200-300 words.

\*It should be a handwritten project.

\*Paste relevant map, pictures and information, graphs and newspaper articles.

## History :FORESTRY IN INDIA-

- Traditional uses of forests/forest products in India
- Scientific forestry in India by the British
- Measures taken to save wildlife and forests in India

Note:\* Students will collect research material and prepare their interdisciplinary project files in the classroom in the month of May/July

#### 3.Geography-

Prepare a project on Disaster Management on the topic: "Climate Change and Heatwaves: Impact on India"

The objective of this holiday homework project is to deepen your understanding of disaster management concepts and develop practical skills for preparedness.

1. The project will be made on A4 sheets. Total number of pages:8

2. It should be a handwritten project.

3. Use relevant pictures, graphs and newspaper articles.

4. The project should be tied with a tag. Do not use any folder or do spiral binding.

**5.**Ensure that your presentation is well-organized, visually appealing, and effectively communicates your findings and insights

**6.**Your project will be evaluated based on criteria such as content accuracy, depth of research, clarity of presentation, creativity, and adherence to instructions.

Instructions:

Page 1- Cover page: Your name, class section, roll no., Session 2025-26

Page 2 – Acknowledgment

Page3- Index

Pages 4-7-

- Introduction: meaning of disaster and heatwave
- Why is a heatwave happening in India?
- Which states are affected by heatwave in India?

• What are the effects of heatwave in India- on human health, agriculture, infrastructure, and ecosystems.

• Management and Mitigation Strategies: What are the safety precautions for heatwaves. (Refer NDMA guidelines).

• Include case studies or real-life examples to illustrate the severity of the impacts.

Page 8 - Bibliography (List of books, sites used as references)

Last date of submission – July 25,2025

#### COMPUTER

1. Create a timeline of key milestones in AI development. Include notable people,

inventions, and breakthroughs.

**2.** Draw and describe your own AI-powered robot that solves a real-world problem (e.g.,

environmental cleanup, elderly care).

Mention the sensors, data used, and how it learns and the working of your AI

Robot.

Give a creative name to your Robot

Paste drawing of your AI Robot and write the description of your Robot in your

Project file.

3. Revise Python programs, Chapter 1 and Chapter 2 from your book.

ART

Do the following work of art book as mentioned below.

\* Unit 7- Caricature( to be done in book using black gel pen only)

\* Unit 9- Landscapes, as instructed in book, accordingly use the colour medium. ( To be done in art file/ sheets)

\* Unit 11- Sketching ( to be done in art book using graphite pencils)