

CLASS: IX
HOLIDAY HOMEWORK 2026-27
ENGLISH IX : A & B

Instructions:

→ Holiday Homework carries marks in Internal Assessment; therefore, submission of the work after the vacation is compulsory for every student.

→ The assigned tasks must be completed neatly and presented properly in the **Fair Register** **(Literature/Writing).**

→ All questions should be completed in the given sequence.

→ Students will be assessed on handwriting, presentation, neatness, completion of all assigned tasks, and proper indexing of the work.

Questions:

1. Learn Chapter 2 of Kaveri, "The Pot Maker", and write the summary and word meanings of the chapter.
2. Write an essay on the topic "How I Spent My Summer Vacation" in 100–120 words.
3. Write a speech on "Make in India and Its Relevance" in 100–120 words.
4. Complete and revise the syllabus covered till May.

HINDI

1. बिजली के संकट को लेकर दो व्यक्तियों की बातचीत लिखिए। (संवाद लेखन)

2. पत्र लेखन —

(क) आपकी पासबुक खो गई है। इसकी सूचना देते हुए बैंक अधिकारी को पत्र लिखिए।

अथवा

(ख) अपने पिता जी को पत्र लिखकर बताइए कि ग्रीष्मावकाश में आपने क्या-क्या कार्यक्रम बनाए।

3. निम्न में से किसी एक विषय पर अनुच्छेद लेखन लिखिए — (100–120 शब्दों में)

(i) पराधीनता — एक अभिशाप

(ii) जीवन में सत्संग का महत्व

(iii) विद्यार्थी जीवन

(iv) पुस्तकालय कितने उपयोगी

4. 'रैदास के पद' को इंस्टा पोस्ट की तरह डिजाइन करो — लाइक, कमेंट दिखाओ।

5. सोशल मीडिया ट्रेंड —

प्रश्न: #JusticeForHeeraMoti ट्रेंड हो जाए तो

3 ट्वीट कैसे होंगे?

नोट - यह कार्य कार्ड बोर्ड फाइल में पूर्ण करना अनिवार्य है। कार्य करते समय रचनात्मकता, स्वच्छता, शुद्ध लेखन तथा विषय से उचित सम्बद्धता का विशेष ध्यान रखें।

MATHS

1. Write and learn squares from 1 to 25 and cubes from 1 to 10.
2. Write and learn all formulas of volume and surface areas of solids (cuboid, cubes, cylinder, cone, sphere, hemi-sphere)
3. Do all MCQ of ch.2 and ch.9

Note: Do all the holiday homework in your fair note-book.

SCIENCE

PHYSICS

1. Derive the all equations of motion (First, Second, Third) by graphical method in separate file sheet.
2. Do Ten numerical related to above equations of motion from NCERT or Manjeet kaur books
3. Define Uniform circular motion with two example and write five numericals related to uniform circular motion.
4. Draw the graph related to uniform and non-uniform motion, uniform and non uniform velocity, uniform and non uniform acceleration in graph paper and paste in file sheet.

Note: Do the physics Holiday homework in file Sheets.

CHEMISTRY

1. Case – Based Questions:-

(i) During a camping trip, Ramesh collected muddy pond water in a container & let it stand undisturbed for an hour. The heavy mud particles settled to the bottom, leaving clearer water on top. He carefully poured the top layer into another container and passed it through a fine clean cloth to remove the remaining floating particles.

- a) Identify the type of mixture muddy water represents based on particle size and uniformity.
- b) Name the two distinct physical processes Ramesh used before passing the water through the cloth.
- c) Explain how the size of the pores in the cloth helps separate the remaining suspended particles.
- d) Suggest one chemical method they must use after these physical separations to make the water safe for drinking.

2. Crude oil is a complex underground liquid mixture of useful components like petrol, diesel, kerosene, LPG and lubricants. It is heated in a tall fractionating column. Because these components have different boiling points, they vaporize and condense at different levels of the tower to be collected separately.

- a) Name the specific separation technique used to separate components of crude oil.
- b) Explain why simple distillation cannot be used effectively to separate this type of mixture.
- c) Identify the function of the glass beads inside a fractionating column during the process.
- d) Predict which component will condense at the topmost part of the tower, one with a lower boiling point or a higher boiling point.

3. To analyze a threatening letter, a forensic scientist put a drop of the suspect's blue ink near the bottom edge

of a filter paper strip and lowered it into water. As the water moved up the paper, the single blue ink drop separated into three distinct coloured spots (Red, Yellow and blue) at different heights.

- a) State the principle on which the technique of Chromatography works.
- b) Identify the mobile phase and the stationary phase in the experiment describe above.
- c) Reason why the three colours travelled to different heights on the filter paper strip.
- d) Application Mention one other field where this separation technique is widely used.

Activity - Based Practical Task

⇒Perform an experiment at Home :

Dissolve one tablespoon of Sugar in a glass of water to make a solution. Keep adding Sugar until no more Sugar dissolves at room Temperature.

- a) Record your observations : Note what happens to the extra Sugar.
- b) Experiment with Temperature : Heat the solution gently on a stove and Observe what happens to the undissolved Sugar at the bottom.
- c) Report write - up : Write a short 100 word Summary explaining the concepts of Saturated Solution, Solubility, and the effect of temperature, based on your experiment.

Core Conceptual Questions :-

- 1.Explain why a Solution is considered a mixture and not a pure Chemical Compound.

BIOLOGY

1. Graphic Timeline:

Design a timeline chart on an A4 sheet tracing Cell discoveries from Robert Hooke (1665) to the formulation of Cell Theory by Schleiden, Schwann, & Virchow.

2. Core Conceptual Worksheet:

1. Why is the plasma membrane called a selectively permeable membrane?
2. What would happen to the life of a cell if its Golgi apparatus was completely removed?
3. Name the types of plastids more common in –
 - (a) Leaves of plant
 - (b) Colourful flowers
 - (c) Root of plants
4. Draw diagrams of plant cell & animal cell. Label the cell organelles present in them.
5. State the functions of each of the following components of the cell –
 - (a) Plasma Membrane
 - (b) Nucleus
 - (c) Mitochondria
 - (d) Ribosomes
6. Write any six points of differentiation between plant and animal cell.

7. Case–Based Questions:

(i)Cells contain specialized internal structures called organelles. Organelle X contains genetic material (DNA) & directs all cellular activities, earning it the title “Brain of the cell”. Surrounding organelle X is a network of membrane-bound channels. Rough ER is covered in ribosomes and synthesizes proteins, while Smooth ER

synthesizes lipids. These proteins and lipids are then sent to organelle Y, which consists of stacks of flattened sacs. Organelle Y modifies, packages, and dispatches these materials to various targets inside and outside the cell.

(a) Identify organelles X & Y based on the description provided above.

(b) Differentiate b/w the functions of RER & SER.

(c) Name the organelle containing digestive enzymes that is directly formed by the packaging activity of organelle Y.

(ii) Plant and animal cells generate energy differently. Plant cells possess unique green chloroplasts that trap solar energy to manufacture food. However, both cell types contain rod-shaped mitochondria, which oxidize food molecules to release & store energy as ATP. Interestingly, both mitochondria and chloroplasts contain their own DNA and ribosomes.

(a) Justify why mitochondria are universally known as the “Powerhouse of the Cell”.

(b) State the full form of ATP. Why is it referred to as the energy currency of the cell?

(c) Explain why mitochondria and plastids are called “Semi-autonomous organelles”. What unique structures allow them to be classified this way?

SOCIAL SCIENCE

Class 9 SST Project File

First Page Sequence

Cover Page

Acknowledgement

Certificate

Index

Topic Introduction

Main Content

Conclusion

Bibliography

SOCIAL SCIENCE SCRAPBOOK PROJECT :

(3D Picture & Creative Art Work Based)

HISTORY

1. **Create a 3D scrapbook page on** Indus Valley Civilization using layered pictures and paper folding art.
2. Make a pop-up timeline of famous Indian rulers with creative decorations.
3. Design historical monuments with 3D paper cutting and shadow effects.
4. Show ancient lifestyle using raised pictures and colorful art work.

GEOGRAPHY

1. Make a 3D volcano eruption scene using paper art and color shading.
2. Create mountain types with layered paper art and cotton effects.

Artificial Intelligence

1. Design a poster on “Internet Safety”.
2. Make a list of ICT tools used in your school.
3. Track your daily activities and identify how you manage your time.
4. Create a weekly digital safety checklist for students.