



ARMY PUBLIC SCHOOL, CHANDIMANDIR
HOLIDAY HOMEWORK
CLASS- IX (SESSION:2024-25)



1. Keep your Child Stay Active and Healthy. Long breaks may be boring for your kids.
2. Engage your Child in Reading.
3. Let your Child Explore the World outside.
4. Engage your Kids in Arts & Crafts.
5. Writing a Daily Journal.
6. Make a Pet-Rock.
7. Go Stargazing.

English

1. The Book Detective:

a) Read the chapter “ My Childhood” from the book “Beehive”.

b) Read the autobiography "Wings of Fire" by APJ Abdul Kalam.

Identify similarities and differences in the portrayal of childhood experiences, challenges, and aspirations. Identify at least three core values or life lessons derived from APJ Abdul Kalam's autobiography "Wings of Fire." Provide examples from the text that illustrate these values or lessons.

2. Imagine it's 2074: Write a letter to yourself from the future. Reflect on your hopes, dreams, and what the world might be like in 50 years. Include interesting slang terms you think might be popular then!

3. Interview the Extraordinary: Imagine you can interview a historical figure, fictional character, or even a future version of yourself. Write a detailed interview, including questions and answers, that reveals something unique about the interviewee.

- **Revise the work done in class.**

Hindi

प्रश्न 1. अनुच्छेद लेखन करें-

पेज - 103,104, प्रश्न 15, 20, 23, 37, 39

प्रश्न 2. पत्र लेखन करें

पेज -116, प्रश्न 2, 9, 11, 14, 18

प्रश्न 3. संवाद लेखन करें -

पेज -128, प्रश्न 2,6,9,12,14

प्रश्न 4. उपसर्ग प्रत्यय

व्याकरण पुस्तक में दिए गए अभ्यास कार्य से करें ।

कला एकीकरण गतिविधि

*हरियाणा तथा मणिपुर का तुलनात्मक विवेचन करते हुए दोनों राज्यों के दो दो प्रसिद्ध पर्यटन स्थलों के नाम लिखें व चित्र चिपकाएं।

*दोनों राज्यों के एक एक नृत्य व एक एक पारंपरिक पहनावे का चित्र चिपकाएं।

कक्षा में कराया गया संपूर्ण कार्य पूरा कीजिए और प्रथम इकाई परीक्षा के लिए याद कीजिए।

Mathematics

- 1) Do all solved examples of chapters 1, 2, 3 and 4 from NCERT Mathematics Textbook.
- 2) Practice chapters -1, 2, 3 and 4 from Mathematics Textbook by R D Sharma. (Students to solve minimum 20 questions from each chapter in a separate Note-book)
- 3) Activities:
 - a) Construct a Square-Root Spiral.
 - b) Represent $\sqrt{7.4}$ on number line. Write the steps of construction.
 - c) Obtain the mirror image of a geometrical figure with respect to i) X- axis ii) Y- axis on a graph sheet. Write the co-ordinates of vertices of mirror images so formed.
(Geometrical figure) - Plot the points A(3,0), B(3,1), C(2,1), D(2,2), E(1,2), F(1,3) and G(0,3). Join the points to obtain the figure of a staircase)
 - d) Draw the graphs of following linear equations and write the co-ordinates of the points where the line touches X-Axis and Y-Axis:
 - a) $2x + y = 3$
 - b) $x + y = 7$
 - c) $2x + 3y = 12$

Science

CHEMISTRY

1) Art Integrated Learning Activity

- a) To study the effect of temperature on the rate of diffusion.
 - Take two glasses/beakers filled with cold water. Put a drop of blue or red ink slowly and carefully along the sides of the first beaker and honey in the same way in the second beaker. Leave them undisturbed • Record your observations.
 - What do you observe immediately after adding the ink drop?
 - What do you observe immediately after adding a drop of honey?
 - How many hours or days does it take for the colour of ink to spread evenly throughout the water?
 - Now repeat the above activity to study the effect of temperature on the rate of diffusion
 - Take hot water in two beakers and repeat the above activity.
 - How much time does it now take for the colour of ink to spread evenly throughout the water?
 - Is it more or less than in cold water.Explain possible reason for your observations.

The work will be assessed on the basis of handwriting, presentation, neatness, indexing, and completion of activity.

NOTE: Students to do above activity in Chemistry notebook.

2) Write the following practical in the lab manual

Preparation of –(a) a true solution (b) a suspension (c) a colloidal solution

Distinguish between these on the bases of –Transparency, Filtration criteria and Stability

BIOLOGY

1) Art Integrated Learning Activity

A) Take four peeled potato halves and scoop each one out to make potato cups. One of these potato cups should be made from a boiled potato. Put each potato cup in a trough containing water. Now, (a) Keep one cup empty (b) Put one teaspoon sugar in other cup (c) Put one teaspoon salt in third cup (d) Put one teaspoon sugar in the boiled potato cup . Keep these for two hours. Then observe the four potato cups and answer the following:

- (i) Explain why water gathers in the hollowed portion of the cups.
- (ii) Why is potato necessary for this experiment?
- (iii) Explain why water does not gather in the hollowed out portions of the cups.

NOTE: students to do above activities in Biology notebook.

2) Write the following practical in the lab manual

Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells. Record observation and draw their labelled diagrams.

➤ **Revise PT I Syllabus**

PHYSICS –

1. Do the Activity 8.9 & 8.10/ 7.9 & 7.10 on a graph sheet.
2. Do the Numerical worksheet on Motion in a separate notebook. (worksheet attached)

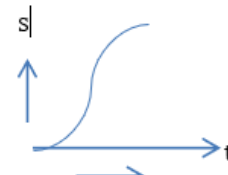
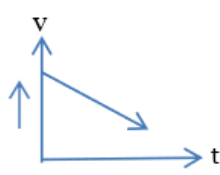
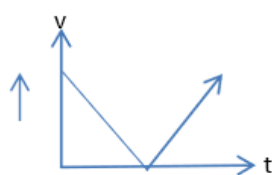
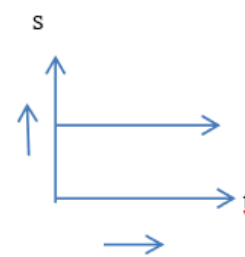
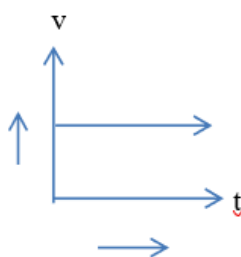
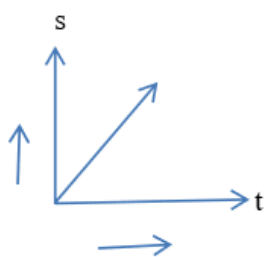
PHYSICS-MOTION

1. Which physical quantity is given by-
 - a) The area under the velocity-time graph.
 - b) Slope of the distance-time graph.
2. Represent the motion of bodies by drawing graphs for the following:
 - a) v-t graph with increasing acceleration.
 - b) s-t graph of a body whose v-t graph is parallel to x axis.
 - c) s-t graph for a stationary body.
 - d) v-t graph of a body having an initial velocity of 10m/s and moving with constant retardation. The body comes to stop in 5 sec.
3. A horse is tied with a 2m long rope at a pole. What distance will the horse run around the pole with a rope tightly stretched, if it takes one and a half round? Also find the displacement of the horse.
4. What does the odometer of an automobile measure? Which of the following is moving faster? Justify your answer. (i) A scooter moving with a speed of 300m/s, (ii) A car moving with a speed of 36 km per hour.
5. An object travels 16m in 4 sec and then another 16m in 2 sec. What is the average speed of the object?

6. An object is dropped from rest at a height of 150m and simultaneously another object is dropped from rest at a height 100m. What is the difference in their heights after 2 sec if both the objects drop with same acceleration of 10 m/s^2 ?
7. A train starting from rest attains a velocity of 72km/h in 5 min. Assuming the acceleration is uniform, find the acceleration the distance travelled by the train for attaining this velocity.
8. The driver of a train travelling at 40m/s applies the brakes as the train enters the station. The train slows down at a rate of 2m/s^2 , the platform is 400m long. Will the train stop in time?
9. Draw the velocity-time graph from the data given below:

Time insec	2	4	6	8	10	12	14
Velocity in m/s^2	5	10	15	20	20	10	0

- a. What type of motion is represented during 0-6 sec?
 - b. What is the acceleration in the first 6 sec?
 - c. Using the graph calculate the distance travelled between 6 to 8 sec (35 m).
 - d. Calculate retardation during 12-14 sec.
1. Interpret the motion of the body from the graphs given below:



Social Science

1) Project on DISASTER MANAGEMENT : Any man-made or natural disaster

* 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.

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

2) Sanskrit is perhaps the oldest language of the world and serves as the root language for many contemporary languages. Write in about 100 words about any one of the following:

- Origin and history of Sanskrit
 - Source books and grammar of Sanskrit
 - Literature, science, mathematics, philosophy which are associated with Sanskrit.
 - Unique learning and dissemination centres of Sanskrit.
 - Global and domestic impact.
 - Promotion by the Government, NGOs and communities
- (To be done on A 4 sheets).

3) Write an essay outlining their vision for India in 2047 including various aspects such as economy, technology, governance, social issues and environment challenges.

4) Revise syllabus given for Periodic Test – 1.

IT

1. Design a collage on verbal, non-verbal and visual mediums of communication.

OR

Design a collage on applications of IT

2. Learn syllabus covered in class for Periodic Test-I

AI

1. AI Project

The topic must contain the following points:

- Introduction to AI
- Types of AI
- Uses of AI
- Advantages/ Disadvantages of AI

Make your project on A4 sheet paper. Write information and add pictures to make it attractive or you can draw pictures. On the first page write your name class and section. Use at least 5 pages to complete the project

2. Make poster on the given topic: “ AI Robotics”.

WISH YOU HAVE A GREAT SUMMER VACATION !