ARMY PUBLIC SCHOOL, CHANDIMANDIR
HOLIDAY HOMEWORK
CLASS- X (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. Reading, is a journey undertaken with an intent, where each page turned unveils new thoughts, emotions, and insights. It is a process of interpretation, analysis, and synthesis that develops critical thinking and empathy. Keeping this in view, find out about the **National Reading Day** and prepare a writeup in about 100 to 150 words.

2. **Newspaper Activity:** Letter to the Editor appears in almost every newspaper. It serves as a forum for citizens to voice their perspective on issues affecting community/society. Take minimum five newspapers and refer the Letter to the Editor section. After reading, form five question statements for Letter to Editor according to the content in each letter. Also paste the newspaper cuttings as evidence of authenticity of source.

3. **ACROSTIC Poem:** An acrostic poem is a composition in which the first letter of every line consecutively forms a word. Attempt writing nine lines on **ADVENTURE.** Incorporate the use of the poetic devices learnt. Refer to the given example. (The poem should not be copied from the internet, present your original ideas.)

Wind to snow to get to the sea

In the snow, the kids play.

Near our house, a pyramid of snow grows.

The EARTH sleeps in winter.

Even on cold days, I like to play outside.

Restful and peaceful, all the people go to sleep. GOOD NIGHT!

Hindi

प्रश्न1.पत्र लेखन करें

आपके क्षेत्र में बुजुर्गों के साथ होने वाली अनदेखी का उल्लेख करते हुए किसी प्रतिष्ठित समाचार पत्र के संपादक को पत्र लिखें।

प्रश्न 2.लघुकथा लेखन

मेरी अंतरिक्ष की यात्रा(काल्पनिक कहानी)

मुहावरे

20 मुहावरे अर्थ सहित लिख कर वाक्य बनाएँ।

कला एकीकरण गतिविधि

*हरियाणा तथा मणिपुर का तुलनात्मक विवेचन करते हुए दोनों राज्यों के क्षेत्रफल,जनसंख्या, भाषा , फसलों के नाम लिखें व चित्र चिपकाएं।

*दोनों राज्यों के प्रसिद्ध खाने तथा पोशाक का नाम लिखें व चित्र चिपकाएं।

Mathematics

1) Do all solved examples of chapters 1, 2, 3, 4 and 5 from NCERT Mathematics Textbook.

2) Practice chapters -1, 2, 3, 4 and 5 from Mathematics Textbook by R D Sharma.
(Students to solve minimum 20 questions from each chapter in a separate Note-book)

3) Activities:

a) Represent geometrically the zeroes of the following Polynomials:
i) Linear polynomial $y = 2x + 3$
ii) Quadratic polynomial $y = x^2 - 3x - 4$

b) To verify the conditions of consistency of a system of linear equations in two variables by plotting the graphs of following pair of linear equations;
i) $x - 2y = 0$; $3x + 4y - 20 = 0$
ii) $2x + 3y - 9 = 0$; $4x + 6y - 18 = 0$
iii) $x + 2y - 4 = 0$; $2x + 4y - 12 = 0$

c) To verify that the given sequence is an arithmetic progression by paper cutting and pasting method.
- Activities has to be done in a separate activity file.

Science

Students to make working model on any science topic.(individually or group(not more than 3 students).

Activity1

Biology – Sports integrated project

1. Make a tabular chart on breathing rate during different physical activities. Count the breaths in one minute after doing 10 minutes of following physical activity.

   1. Sitting position
   2. After Climbing stairs.
   3. After Running 200 meters.
   4. Lifting heavy weight.

2. Learn and write chemical formulae of 5 salts available at home and learn the Valencies.

3. Students to prepare indicator using beetroot and test atleast 5 solutions available at home and conclude nature of substance.

NOTE: Students to write above activities in Biology notebook.

Chemistry

Write the following practicals in the Practical file:

a)   Performing and observing reaction and classifying them.

b)   Studying the properties of acids and bases.

Biology

Write the following practicals in the Practical file:

a)   Preparation of temporary mount of a leaf peel.

b)   Carbon dioxide is given out during respiration.

Physics

Write the following practicals in the Practical file :

a)   To find the focal length of a concave mirror.

b)   To find the focal length of a convex lens.

c)   To trace the path of Light passing through a rectangular glass slab.

Complete the given numerical assignment on 'LIGHT' chapter in your notebook.

ASSIGNMENT-LIGHT
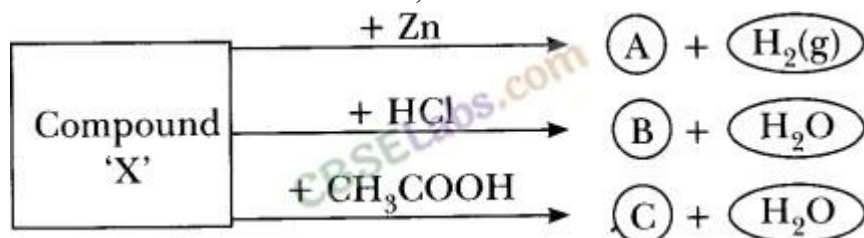
Do the following Questions:

1. The magnification produced by a spherical mirror is -3. List four information you obtain from this statement about the mirror/ image? Between which two points of a concave mirror should an object be placed to obtain amagnification of -3?

2. A student wants to project the image of a candle flame on a screen 48cm in front of a mirror by keeping the flame at a distance of 12cm from its pole. (i) Suggest the type of mirror he should use (ii) Find the linear magnification of the image produced. (iii) How far is the image from its object? (iv) Draw a ray diagram to show the image formation in this case. (A: (iii) - 36cm)

3. When an object is placed at a distance of 60cm from a convex spherical mirror, the magnification produced is ½. Where should the object be placed to get a magnification of 1/3? (A: -120cm)

4. A 1.2cm long pin is placed perpendicular to the principal axis of a convex mirror of focal length 12 cm, at a distance of 8cm from it. (a) Find the location of the image (b) find the height of the image. (c) Is the image erect or inverted? (A: 4.8cm, 0.72cm, erect)

5. An object placed 45cm from a lens forms an image on a screen placed 90cm on the other side of the lens. Identify the type of the lens and find its focal length.

6. Two lenses have power of a) +2D b) -4D

I) What is the nature and focal length of each lens.

II) An object is kept at a distance of 100cm from each of the above lens. Find Magnification in each of the two cases.

7. What will happen to a ray of light when it travels from one medium to another having equal refractive indices? Give reason.

8. A student focussed the image of a candle on a white screen using a convex lens. He noted down the position of the candle, screen and the lens as under:

Position of the candle: 12cm Position of the convex lens: 50cm Position of the screen: 8cm

i) What is the focal length of the convex lens?

ii) Where will the image be formed if he shifts the candle towards the lens at a position of 31cm

9. A divergent lens has a focal length of 20cm.At what distance should an object of height 4cm from the optical centre of the lens be placed, so that its image is formed 10 cm away from the lens, find the size of the image formed

10. An object placed 4 cm in front of a converging lens produces a real image 12 cm from the lens. What is the magnification of the image? What is the focal length of the lens? Also draw the ray diagram to show the formation of the image.

BIOLOGY/CHEMISTRY- WORKSHEET

1. Identify the compound X on the basis of the reactions given below. Also, write the name and chemical formulae of A, B and C.

2. You are provided with two containers made up of (A) copper and (B) aluminium. You are also provided with solutions of (a) dilute HCl (b) dilute HNO3(c) ZnCl2 and (d)H2O In which of the above containers these solutions can be kept?

3. On heating blue coloured powder of copper (II) nitrate in boiling tube, copper oxide (black), oxygen gas and a brown gas 'X' is formed.

   (a) Write a balanced chemical equation of the reaction.

   (b) Identify the brown gas 'X' evolved.

   (c) Identify the type of reaction.

4. Why and how does water enter continuously into root xylem?
5. Make mind map of Circulatory system in Human beings.
6. The Nephron are structural and functional units of kidneys. These help in both   excretion of nitrogenous wastes through urine and osmoregulation.

   a) What are three fundamental processes of urine formation?

   b) How do kidneys help in osmoregulation?

7. Nisha was in a party where people were dancing on the dance floor, a person on the floor suddenly felt severe pain on chest he also fell dizziness some people were mentioning that he might have a heart attack. Nisha immediately called ambulance. Read about passage and answer the following questions

   A) What are the causes of heart attack?

   B) What are the symptoms of heart attack?

   C) What values were shown by Nisha?

8. Rohit is gone to donate one of his kidney to his friend who had a kidney failure. But when doctor tested for the transplant he refused. Read the passage and answer the following question

    A) Write the cause of kidney failure?

    B) Why did doctor refused for the transplant?

Social Science

Prepare a Project on the following Topics

 The Groups will be roll no. wise

1. Stop the pollution, be the part of the solution. (Roll no. 1 to 10)

2. War kills and Peace heals, use the examples from recent war incidents (Roll no. 11 to 20)

3. Consumer Awareness- "Jaago Grahak Jaago"

Mention the role of various laws for consumer safety including cyber laws. (Roll no 21 to 30)

Art integration: culture of Haryana with Manipur. (Roll no. 31 to 45)

Please note first two projects will be done on project files and project 3rd and 4th will be submitted in PPT's.

Prepare the following Topics for PT-II Exams.

1. Sectors of Indian Economy

2. Gender, Religion and Caste

3. Natural vegetation and wildlife.

4. Making of Global world.

IT

Practice the following practical questions during summer vacations

1. Write your resume/ Bio Data and apply different styles on it.
2. Create a Poster on Health and Safety.
3. Create your own template for any topic of your subject.

(Any 2 from above)

 Write following question answers in IT note book

1. What are templates? What are the advantages of using templates?
2. What is the difference between styles and templates?
3. Explain any four Graphic filters.
4. Explain Image Cropping
5. List any three methods of inserting images in a text document.
6. What do you understand by the terms:

a. Text Wrapping

b. Anchoring

c. Alignment

<u>AI</u>

- "Letter to Future Self" Write one letter to your future what you want see in the future or what you want remind to your future. Just imagine about the next 10 years and what you are thinking about your future (elate with AI). The following points can be included in letter/email:

  1. Start with your interests, hobbies, and skills

  2. Now relate how AI can help you

  3. Write about your future job or career you want to pursue and how AI will make an impact on that

- Write the following python programs in Jupyter notebook. After coding execute the program and take the screenshot of each bug /error free code with its output and upload them on the above-mentioned form individually.

  1. Program to check if the number entered is negative, zero or positive

  2. Program to check if a number is even or odd.

  3. Program to find the largest amongst the three given numbers:

  4. To calculate Area and Perimeter of a rectangle.

  5. To calculate Area of a triangle with Base and Height.

  6. To calculating average marks of 6 subjects

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WISH YOU HAVE A GREAT SUMMER VACATION !