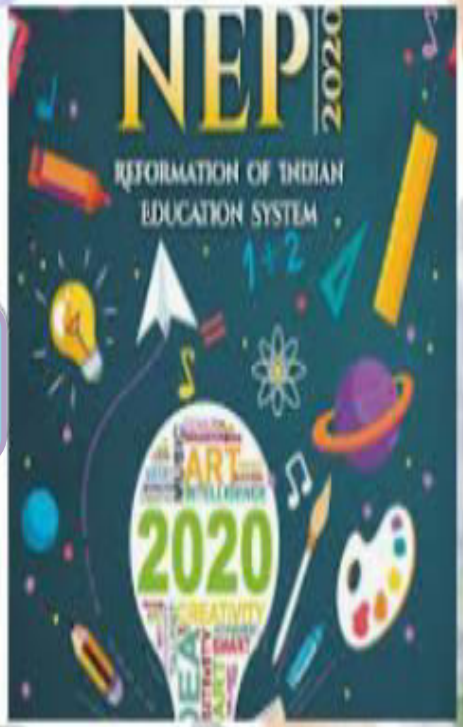
GURU NANAK E.M. PUBLIC SCHOOL

SUMMER HOLIDAY HOMEWORK

CLASS-IX

2025 - 26



ENGLISH

Learning Outcome: Students will be able to know that

- Identify the wind speed thresholds that classify winds as damaging and destructive.
- Evaluate the poet's message in the poem regarding people's perception of wind from a sweet breeze to a destructive force, and its relevance to understanding the power of nature.
- Develop a safety preparedness plan for individuals and communities to lessen the impact of damaging and destructive winds, including measures for securing property and ensuring personal safety

Learning Objective

- Developing strength and courage
- Dealing with nature's power
- Facing hardships

Activity 1

ART Integrated Activity using Adobe Express

Subject Integrated – Geography and IT

Make a to Do List: Know about safety Rules when high wind threat is there:
Subj: English, Text Book – Beehive, Poem- Wind

Disaster Risk Reduction (cbseacademic.nic.in)
DISASTER MANAGEMENT ACTIVITY- DRR Page no. 153 (Destructive Winds)

Strong winds can indeed be highly destructive, causing a range of problems such as damage to infrastructure, uprooting of trees, power outages, and even endangering lives. Wind gusts exceeding 90 km/h are classified as damaging winds and can result in significant property damage. When wind gusts reach 125 km/h or higher, they are considered destructive winds, capable of causing widespread destruction. In extreme cases, violent and destructive winds can lead to catastrophic consequences, including the destruction of homes, severe disruption of transportation systems, and even loss of life.

How will you be prepared for an emergency during strong winds?

- Which is the safest place during strong winds?
- If you are caught outside during high winds?
- If one is driving?
- In the event of a downed power line?

Activity 2

Attempt Unit 2 of Words and Expressions Book. The link has been shared. All answers to be written in the book only.

https://ncert.nic.in/textbook.php?iewe1=2-11

Activity 3

Complete April and May month Assignments in Literature Notebooks.

HINDI

शिक्षण-अधिगम-उद्देश्य :-

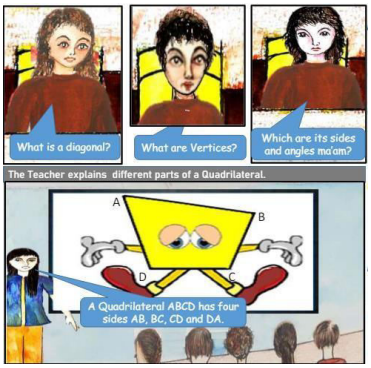
- लेखन-सृजनात्मकता तथा भावाधभMक्ति का पल्लवन।
- सतत जुझारू रहने की प्रेरणा।
- मनन-च ि तन का क्तवकास।
- मौललकता में अधभवृद्धि।

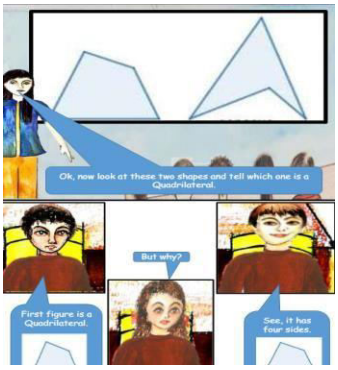
1- 'एवरेस्ट:मेरी शिखर यात्रा' पाठ के आार पर पववतारोहण के दौरान आने वाली कक्तठनाइयों का ध त्रण एवं उनसे ब ाव के उपाय। - आपदा-प्रबं ि न, (Disaster Management) एवं 'कला-क्तवा' के साथ एकीकृत। Adobe Express पर एक न्यूज़लेटर का क्तनमाण। इसके ललए छात्र https://new.express.adobe.com/ सॉMवेयर का प्रयोग करेंगे और Google Classroom पर अपलोड करेंगे।

2- अप्रैल/मई माह की कायवपक्तत्रका अपनी M◌ाकरण-पुशिका में पूणव करें।

MATHEMATICS

A. Creating a comic book using Adobe Express is a great way to integrate technology with Mathematics in line with the National Education Policy (NEP). Here's how you can do it:





1. *Choose a Mathematical Concept*: It could be anything from Algebraic equations to Geometry theorems.

2. *Storyboarding*: Plan out your comic book by sketching rough ideas for each page. Decide on the storyline, characters, and how the math concept will be integrated into the narrative.

3. *Adobe Express*: Use Adobe Express to create your comic book digitally.

4. *Character Design*: Use Adobe Express to design your characters. You can either draw them from scratch using the drawing tools or import images and customize them to fit your story.

5. *Incorporate Math*: Integrate the mathematical concept into the storyline of your comic book. You can do this by incorporating problem-solving scenarios, visual representations of mathematical formulas, or real-life applications of the concept.

6. *Text and Dialogue*: Add text and dialogue to your comic book using Adobe Express. Write clear and concise captions that explain the math concept and move the story forward.

7. *Final Touches*: Add colors, effects, and any final touches to your comic book using Adobe Express. Make sure the visuals are engaging and visually appealing.

8. *Presentation*: Present your comic book to your class using Adobe Express. Explain the math concept and how you integrated it into your comic book using technology.

9. Upload your comic book (not more than 10 pages) in the google classroom under the Folder name 'CLASS IX MATHS SUMMER HHW' by 5th July.

By using Adobe Express to create a comic book, you're not only integrating technology into the assignment but also fostering creativity, critical thinking, and communication skills in line with the NEP. You can take an idea from the given link:-

CBSE Class 9 Mathematics Comic Books Free PDF Download (educart.co)

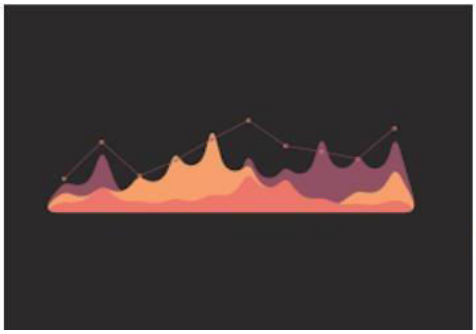
B. Download the **SAFAL PRACTICE WORKSHEET** from Google classroom and practice it in your Maths Notebook**.**

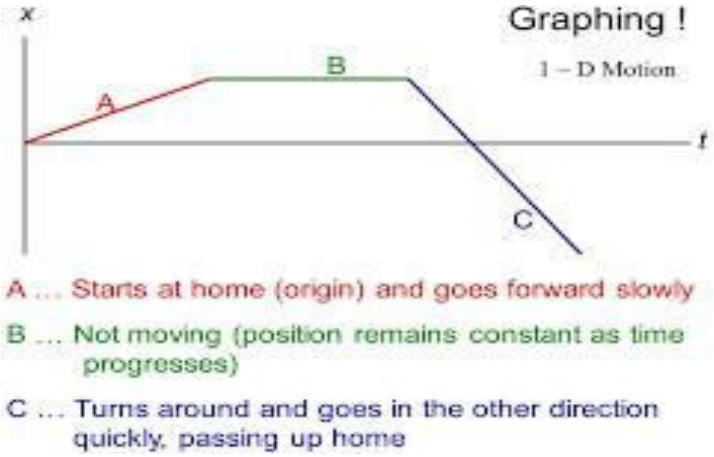
PHYSICS

ACTIVITY

1. Plan to go to a place by a vehicle. Take reading of Odometer and speedometer after 5 minutes till you reach the destination. Record this observation in tabular form plot graph between distance time and speed time. State whether the portion is uniform or non- uniform.

2. **Adobe Express**: Use Adobe Express to differentiate between uniform and non- uniform motion, digitally, using animations.. Examples:





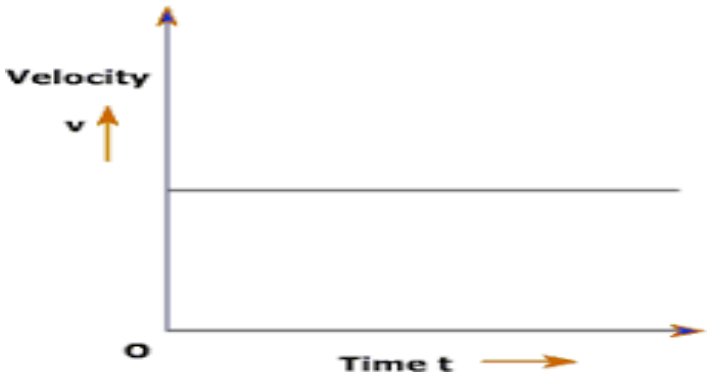
3. **<u>Adobe Express</u>** : Create a comic book page by sketching rough ideas about a scene of an outdoor sport. Decide on different concepts of physics that can be integrated into the narrative.

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 300 m per minute.
   (ii) A car moving with a speed of 36 km per hour.

5. A car travels from stop A to stop B with a speed of 30 km/h and then returns back to A with a speed of 50 km/h. Find
   (i) displacement of the car.

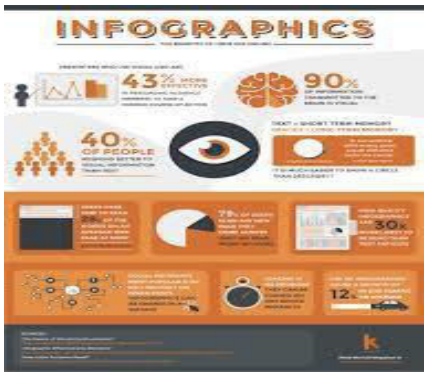
(ii) distance travelled by the car.
(iii) average speed of the car.

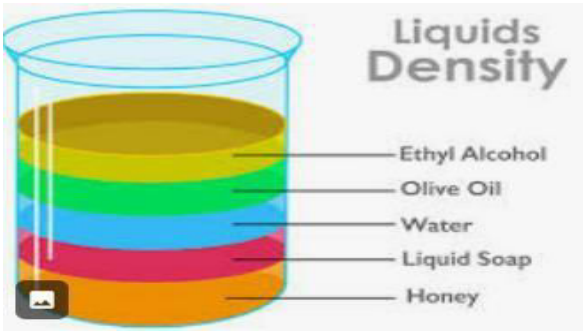
6. Velocity-time graph for the motion of an object in a straight path is a straight line parallel to the time axis.
   (a) Identify the nature of motion of the body.
   (b) Find the acceleration of the body.
   (c) Draw the shape of distance- time graph for this type of motion.



7. Draw the shape of the distance-time graph for uniform and non-uniform motion of object. A bus of starting from rest moves with uniform acceleration of 0.1 ms^{-2} for 2 minutes. Find
   (a) the speed acquired.
   (b) the distance travelled.
8. Define uniform acceleration. What is the acceleration of a body moving with uniform velocity?
9. A particle moves over three quarters of a circle of radius r. What is the magnitude of its displacement?
10. An object starts with initial velocity u and attains final velocity V. The velocity is changing at a uniform rate. What is the formula for calculating average speed in this situation.

CHEMISTRY





(i) Write down the experiments in a practical file as instructed by the subject teacher.

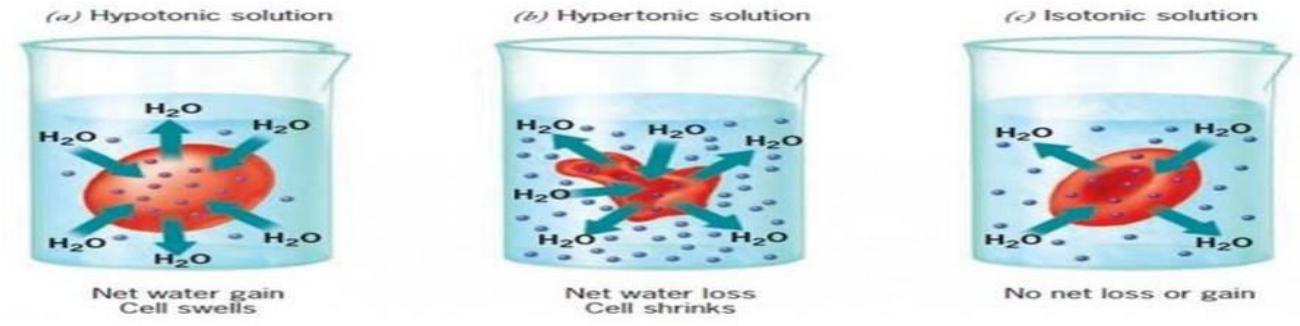
(ii) Create an infographic illustrating the correlation between viscosity and diffusion / Fluidity using Canva/ Adobe Express .

OBJECTIVE-

1. To develop the skill to prepare an infographic that effectively communicates the relationship between viscosity and diffusion through visual elements and concise information.
2. To enhance creative skills and IT skills.
3. To develop data handling skills.

BIOLOGY

Q1. Select any three fruits and vegetables of your choice and use these to show activity with hypertonic solutions, hypotonic solutions and isotonic solutions.



Record your activity in the form of a video LINK shared in Youtube of not more than 2 minutes. Also Prepare P.P.T to explain your observation and conclusion.

Explain disadvantages and advantages of both Exosmosises as well as endosmosis.

Q2. Title: Journey into the Microcosm: Exploring the Fundamental Unit of Life - The Cell

Duration: 2 weeks

Objective:

- To understand the structure and functions of cells.

- To explore the diversity of cells in living organisms.

- To appreciate the significance of cells as the fundamental units of life.

Activities:

Week 1: Exploring Cell Structure and Function

1. Research Assignment:

- Research the history of cell discovery. Create a timeline highlighting major discoveries in the field of cell biology.

2. Cell Structure Models:

- Create 3D models or diagrams representing plant and animal cells. Label the organelles and explain their functions.

3. Microscopy Exploration:

Visit a local laboratory or use online resources to observe different types of cells under a microscope. Sketch your observations and identify key structures.

4. Virtual Lab:

Utilize virtual lab simulations to explore cell structure and function. Perform virtual experiments to understand concepts such as osmosis, diffusion, and cell division.

Week 2: Diversity of Cells and Their Functions

1. Cell Types and Functions:

Research different types of cells found in various organisms (prokaryotic, eukaryotic, plant, animal, etc.). Create a presentation highlighting their unique characteristics and functions.

2. Case Studies:

Investigate diseases or conditions related to cell structure or function (e.g., sickle cell anaemia, cancer). Prepare case studies discussing the impact of these conditions on the body at the cellular level.

3. Field Trip or Guest Speaker:

Arrange a visit to a research institute or invite a biologist to speak about their work in cell biology. Engage in discussions about current research and its implications.

4. Creative Projects:

Choose a medium (e.g., art, poetry, song) to express the importance of cells in living organisms. Showcase your creativity while conveying key concepts learned during the unit.

Assessment:

Research assignments and presentations will be evaluated based on accuracy, depth of understanding, and clarity of communication.

Models and diagrams will be assessed for completeness and accuracy in labeling organelles and explaining their functions.

Participation in microscopy exploration, virtual labs, and discussions will contribute to the overall engagement and understanding of the topic.

Submission:

All assignments and projects should be submitted in the format specified by the teacher. This may include written reports, presentations, digital files, or physical models.

Note to Parents/Guardians:

Encourage your child to actively participate in the activities outlined above. Discuss with them the significance of cells in living organisms and how their understanding of cell biology can be applied in various aspects of life. If assistance is needed, please feel free to reach out to the teacher for support.

ECONOMICS:

Complete any one of the following :

1) Create a visual representation (e.g., map, infographic) illustrating the geographical layout and key features of village Palampur.

OR

2) Design a storyboard or comic strip depicting the daily life and economic activities of the villagers in Palampur.

OR

3) Write a short skit or play highlighting the socio-economic dynamics and challenges faced by the residents of Palampur.

Submission Guidelines:

Your homework should be neatly written or typed.

Include references for any sources used in your research.

Submit your assignment in a folder or document format.

Evaluation Criteria:

Accuracy and completeness of the summary.

Clarity and depth of analysis in answering the analytical questions.

Relevance and insightfulness of the case study.

Creativity and presentation of the creative expression tasks.

Adherence to submission guidelines.

HISTORY/DP:

Socialism in Europe and the Russian Revolution tell us about the evolution of Socialism in Europe. The revolution changed the whole society entirely and raised different questions about the well-being of peasants and workers as well as questions on economic equality. Before the 18th century, society was divided into orders and estates, and the church and aristocracy controlled social and economic power. However, after the revolution, things started to change and people did not want to live under the orders of a higher caste of people. The colonies' development reshaped the idea of social change.

ACTIVITY: Designing a comic strip

Design a comic strip using the Canva application or by drawing on paper using proper colors/black and white imprints. The comic strip should convey the idea of the subtopic chosen by the group.

Basic:

2. Decide on a subtopic that you want to work on.

3. Decide on your format.

4. Formulate the script.

5. Maintain a balance between the text and the pictures.

Subtopics: a. Social Changes in Europe

b. Industrial Revolution

c. The Russian Revolution

Note: Students can use any other subtopic as well provided they mention the topic they have chosen.

Mode of Submission: A hard copy can be submitted to the teacher or through Canva sharing via Google Classroom. Each group will have to present their comic strip in the class.

Learning Outcome: 1. Students will be able to develop a deeper understanding of the topic, " Socialism in Europe and the Russian Revolution".

2. It will help in boosting the creative minds of the students.

3. It will help increase inference by encouraging them to "read between the lines" and infer meaning from the images.

4. It will help increase the students' analytical, cooperative, and communicative skills, adding to their value in education.

Link for referral:

https://www.pinterest.com/pin/682506518511826933/

DP.declare5.GIF (124058 bytes): | Teaching us history, Social studies middle school, Social studies lesson (pinterest.com)

GEOGRAPHY: DISASTER MANAGEMENT PROJECT

Case study- Himalayan floods- 'Floods in state of Himachal Pradesh- 2023'- Causes, affects and solutions.

Learning outcome: Students will be able to

- understand the implications of human interference in natural environment
- analyses the effects of deforestation and unplanned development especially in Himalayan regions.
- demonstrate practical solutions and laws that can prevent further disasters.

Note- Holiday homework will be considered for Multiple Assessment and has a weightage of 10 marks in each subject

SCHEDULE FOR SUBMISSION OF HOLIDAY HOMEWORK

S.NO.	SUBJECTS	DATE OF SUBMISSION
1	SCIENCE(PHYSICS, CHEM. & BIO.)	5 JULY 2025
2	ENGLISH, HINDI	6 July 2025
3	SOCIAL SCIENCE(GEO, HIS, DP) & MATHS	8-12 July 2025

STAY SAFE, STAY HEALTHY AND HAPPY LEARNING 😊 😊 😊