

New Era Progressive School

Korba

Holiday Home Work

Class - IX



ENGLISH / ART INTEGRATED LEARNING

Dear Students,

To encourage creativity, cultural awareness, and presentation skills, you are assigned the following holiday homework:

Project Title: Cultural Handmade Fan and Presentation

Task Details:

Handmade Fan Creation:

Students are required to design and create a **handmade** fan using any suitable materials (eco-friendly materials are encouraged).

The fan should represent the culture of your home state or the paired state, i.e. Gujarat (*as per the Ek Bharat Shreshtha Bharat initiative*).

Written Component (PPT):

Prepare a PowerPoint Presentation (PPT) including the following:

1. Introduction to the chosen state
2. Description of the fan design
3. Materials used in making the fan
4. Cultural significance of the design and materials
5. Conclusion reflecting your learning

Submission Guidelines:

1. The PPT must be original, creative, and neatly presented.
2. This is an **individual** activity.
3. Students must share the PPT link with their respective subject teacher.
4. A printout of the PPT (slide-wise) must be taken and arranged properly in a file.
5. The file is to be submitted to the **subject teacher** after the vacation.

Assessment Criteria:

1. Creativity and effort
2. Relevance to cultural theme
3. Presentation skills (PPT)
4. Neatness and organisation
5. Originality of work

Note:

1. Each student shall present the project individually for a duration of 60–90 seconds speaking time.
2. Students are advised to **avoid plagiarism** and ensure that the work submitted is **entirely their own**.

Submission Date: First week after reopening of school

HINDI

प्रश्न1. आपने अपने ग्रीष्मकालीन अवकाश का सदुपयोग कैसे किया लेख के रूप में लगभग 200 शब्दों में निम्नबिंदुओं को शामिल करते हुए लिखिए।

- 1) छुट्टियों के यादगार दिनों का वर्णन चित्र सहित कीजिएगा।
- 2) यदि आपने कोई नया कार्य सीखा या कहीं घूमने गए हों तो उसका उल्लेख अवश्य करें।
- 3) यदि आपने कोई त्यौहार, जन्मदिन मनाया या किसी की विशेष मदद की है तो उसका उल्लेख भी अवश्य करें।

प्रश्न2. आप अपनी रुचि के अनुरूप एक स्वरचित रचना 'कविता' या 'कहानी' के रूप में लिखिए।

निर्देश:-

- 1) A4 साइज पेपर पर सुंदर अक्षर में लिखें।
- 2) भाषा की शुद्धता का विशेष ध्यान रखें।
- 3) फाइल के अंतिम पेज पर समय के सदुपयोग पर एक सूक्ति अर्थ सहित अवश्य लिखें।

SANSKRIT

- 1) व्याकरण संचिकायाम् (काँपी में) दशवाक्ये स्वपरिचयं लिख।

MATHEMATICS

Theme Integrated Project

Project Title (Students choose any ONE):

- 1) “Journey of Number System in Real Life”
- 2) “Rational vs Irrational Numbers in Daily Life”
- 3) “Importance of Number System in Science & Technology”
- 4) “From Fractions to Irrational Numbers – A Visual Study”

NOTE: Students will prepare a PowerPoint Presentation (PPT) on the chosen topic and:

- Save it in a pen drive
- Submit after summer vacation
- Prepare a short classroom presentation (2–3 minutes)

PPT Content Guidelines

(A) Introduction

- What is Number System?
- Types (Natural, Whole, Integer, Rational, Irrational)

NOTE: Make a flow chart to explain complete number system

(B) Concept Explanation

- Rational numbers (examples)
- Irrational numbers ($\sqrt{2}$, π etc.)
- Number line representation

(C) Real-Life Applications

- Where we use: Fractions Irrational numbers
- Add images/examples

NOTE: Use Images to explain the need of rational number in day to day life

(D) Interesting Facts

- Example:- π is non-terminating and $\sqrt{2}$ is irrational

(E) Activity / Visual

- Number line diagram
- Comparison chart

(F) Conclusion of your topic

SCIENCE

BIOLOGY

1) Cellifornia

Imagine a cell as a busy city. Who would be the mayor, power station, transport system, and security? Explain creatively.

OR

“SUPERCELL”

Create your own cell with special powers (e.g. glowing, self healing, super strength, infinite energy etc). Draw and explain its organelles and functions.

OR

What If Cells Disappeared?

Imagine a body where cells suddenly stopped functioning. What would happen to living organisms?

2) Selective Permeability Model (Concept based on Cell Membrane)

OR

Perform a household experiment to demonstrate diffusion and osmosis.

PHYSICS

GENERAL INSTRUCTIONS :PERFORM ANY ONE TASK OUT OF FOUR.

Task 1. The "Soundscape" Digital Map

Objective: To explore the properties of sound and noise pollution in your local environment.

The Task: Use a free decibel meter app on a smart phone to measure sound levels in five different locations (e.g., a park, a busy intersection, your kitchen, a library, and a balcony).

Creative Output: Create a "Sound Map" on a poster or a digital slideshow. For each location, record: The average decibel level. A description of how sound reflects (echoes) or is absorbed in that environment.

Task 2. The "Friction-Free" Challenge

Objective: To investigate how surface texture and lubricants affect the force of friction.

The Task: Build a simple inclined plane (a wooden plank or heavy cardboard). Test how long it takes for a toy car or a block to slide down the ramp using different "road" surfaces: sandpaper, aluminum foil, a layer of oil or soap, and a dry cloth.

Creative Output: Design a "Product Comparison Report" as if you were an engineer testing a new type of non-slip flooring or a high-speed racing track. Include a data table and a bar graph of your results.

Task 3. Newton's Laws Comic Strip

Objective: To explain complex laws through storytelling and visual art.

The Task: Create a 6-to-8 panel comic strip featuring an original "Physics Superhero" or "Physics Villain" whose powers are based on Newton's Three Laws of Motion.

Creative Output: The comic should demonstrate:

Inertia: The character struggling to stop or start moving.

F=ma: The character needing more force to move a heavier object.

Action/Reaction: The character using a recoil or a jump to move forward.

Task 4. The "Solar Cooker" Prototype

Objective: To demonstrate the reflection and absorption of light energy.

The Task: Using a pizza box, aluminum foil, and plastic wrap, construct a functional solar oven. Test it by trying to melt a marshmallow or a piece of chocolate on a sunny day.

Creative Output: A "Vlog Style" video or a photo-journal documenting the build process and the temperature changes over 30 minutes.

CHEMISTRY

1. The Great Crystal Grow-Off

Concept: Saturated solutions and crystallization.

The Task: Create a Saturated Solution by dissolving as much salt or sugar as possible into boiling water.

The Process: Tie a string to a pencil and rest the pencil across the top of the jar so the string hangs into the liquid. Leave it undisturbed in a cool place for a week.

Observation :Describe the shape of the crystals that form. Are they geometric? Transparent?

2. On an A4 size paper, draw a poster of a future invention that uses Chemistry to solve a big problem (like pollution, lack of water, or global warming). Your poster must include:

1. **A Name:** Give your invention a cool name.

2. **The Drawing**: A neat, colorful drawing of your invention.
3. **The Labels**: Point to different parts of your drawing and explain what they do.
4. **The "Chemistry Connection"**: Write 2-3 sentences explaining which Chemistry concept it uses (Example: Separation of mixtures, Atoms, Molecules, or States of Matter).

Instructions :

- Paste 2–4 photos step-by-step with captions.
- Submit the holiday homework in a properly maintained file.

Submission:

Submit after vacation with neatness and creativity.

SOCIAL SCIENCE

- 1) Write about famous historical conflicts.
- 2) Mapping physiographic divisions.

Note- The Holiday homework should be done in file and paste pictures wherever required.

INFORMATION TECHNOLOGY(402)

- 1) What are the different Barriers to communication? Use markers and colours to highlight differences amongst all
- 2) Define 7 Cs of effective communication. Use markers and colours to highlight differences amongst all

Note: IT holiday homework has to done in IT note book.