SADHU VASWANI INTERNATIONAL SCHOOL FOR GIRLS INTER-DISCIPLINARY PROJECT HOLIDAY HOME WORK CLASS VII (2025-26)

This year's Summer Holiday Homework invites you on an exciting journey of learning and discovery, inspired by global themes declared by the United Nations: The **International Year of Cooperatives**, the urgent call for **Glaciers Preservation**, and the incredible frontiers of **Quantum Science and Technology**. These themes have been chosen to help you connect your classroom learning with the real world, encouraging you to explore how people across the globe work together to solve challenges, protect our planet's fragile ecosystems, and unlock the mysteries of the universe through cutting-edge science. Each activity is designed to spark your curiosity, build your creativity, and strengthen important skills like collaboration, problem-solving, innovation, and communication. Through research, hands-on tasks, and thoughtful reflection, you'll discover how science, society, and sustainability are closely linked—and how you, too, can contribute to a better future.

Let this summer be your gateway to thinking deeply, imagining boldly, and learning joyfully —far beyond the classroom!

This project comprises of 7 parts -A, B, C, D, E, F and G

- The class will be divided into groups comprising 5 members each on the basis of roll numbers i.e., 1-5, 6-10, etc. (8 groups per class)
- Each group is expected to do all the 5 tasks given under each part (One task per child for each part).
 - Task 1 is for Roll Nos. 1, 6, 11, 16, 21, 26, 31, 36, 41
 - Task 2 is for Roll Nos. 2, 7, 12, 17, 22, 27, 32, 37, 42
 - Task 3 is for Roll Nos. 3, 8, 13, 18, 23, 28, 33, 38, 43

Task 4 is for Roll Nos. 4, 9, 14, 19, 24, 29, 34, 39, 44

- Task 5 is for Roll Nos. 5, 10, 15, 20, 25, 30, 35, 40, 45
- Each group will have a leader who will be coordinating with the group members, so that the work is completed and submitted on time
- Each group will collate and present their work in one single file only
- Make use of eco-friendly materials for preparing the models
- For Part G, students must take up task according to the instructions given and not according to the roll numbers.

Note: Students must take up Weekend Cleanliness tasks diligently, according to the given schedule.

PART A

Task 1: Digital Poster – Glaciers in Danger

Activity: Design a digital poster using Canva or any drawing software that spreads awareness about the causes and consequences of glacier melting, along with ways to protect them. Where to do: Printed copy and soft copy (A4/A3 size) Learning Outcome: Enhances creativity and environmental awareness

Task 2: Slogan Writing and Display Board

Activity: Create 5 impactful slogans related to glacier preservation. Use colored ice crystal or snowflake shapes to write each slogan.

Size- Each Cut-out: Around 12–15 cm in diameter

- Big enough to write a slogan clearly and decorate
- You can vary sizes slightly for a dynamic look

Task 3: Reading Activity – Article Reflection

Activity: Read any one article related to melting glaciers from a newspaper, magazine, or website. Write a short reflection (100–150 words) on what you learned and how it connects to climate change. Where to do: A4 sheet

Articles:

- <u>https://www.unesco.org/en/articles/unesco-and-wmo-launch-international-yearglaciers-preservation-2025</u>
- <u>https://www.un-glaciers.org/en</u>
- <u>https://www.unesco.org/en/articles/high-level-international-conference-glacierspreservation?hub=348</u>
- <u>https://www.google.com/amp/s/timesofindia.indiatimes.com/home/environment/globalwarming/sa</u> ve-the-worlds-glaciers-to-save-the-planetun/amp_articleshow/117460845.cms

Learning Outcome: Improves reading comprehension and critical thinking

Task 4: Glacier Glossary Wall

Activity: Prepare a glossary of at least 10 terms related to glaciers (e.g., calving, moraine, ice shelf). Include each word's meaning and use it in a sentence.

Where to do: Index cards or colored ice-themed cutouts for wall display Learning Outcome: Expands subject-specific vocabulary

Size- Each card or cutout: 12 × 15 cm

• Enough space for word, definition, and sentence

Task 5: Storyboard - "The Last Glacier"

Activity:

Write a short story (150–200 words) titled "The Last Glacier". Break it into 4–6 parts and illustrate each part using a comic-style storyboard.

Instructions:

- Use **1 frame per panel** to show a key moment of the story.
- Total: **4 to 6 panels** (i.e., 4–6 frames).
- Add short **captions**, **speech bubbles**, **or narration** to support your story.

Where to do: A3 or A4 sheet

Learning Outcome: Encourages narrative skills and sequencing

PART B

Worksheet to identify steps of a project (An interdisciplinary approach) Main Topic: ग्लेशियर संरक्षण : आज की आवश्यकता

H.H.W given in brief: पंच तत्व (पृथ्वी, जल, अग्नि, आकाश, वायु) ही प्राण तत्व: - विषय के आधार पर निर्देशान्सार कार्य कीजिए |

वर्ग 1. ग्लेशियर संरक्षण पर आधारित एक आकर्षक सचित्र ज्ञानवर्धक आवरण पृष्ठ बनाइए तथा उसे एक आकर्षक -सा शीर्षक भी दीजिए | (ए-3 आकार के कागज पर)

वर्ग 2. नदी , तालाब , पोखर तथा वर्षा के जल के महत्त्व को प्रदर्शित करते हुए जल संरक्षण पर आधारित एक - एक नारा लिखते हुए आकर्षक सा सचित्र पोस्टर बनाए | (ए-3 आकार के कागज पर)

वर्ग 3. जल - चक्र की प्रक्रिया को प्रदर्शित करते हुए एक आकर्षक से माडल का निर्माण कीजिए तथा उस पर जल महत्ता एवं संरक्षण का प्रदर्शन कीजिए | (सामान्य आकार का कट - आउट लगभग 15 X 15 इंच)

वर्ग 4. वर्षा के जल के संरक्षण पर आधारित आकर्षक - सा सचित्र विज्ञापन तैयार कीजिए | (ए-3 आकार के कागज पर)

वर्ग 5. दैनिक कार्यों में प्रयोग होने वाले जल के संरक्षण के उपायो को (बंधनवार, झालर, लटकन, पानी की टंकी, नल से टपकती बूँदे, छतरी आदि) कट - आउट पर प्रदर्शित कीजिए | (ए - 3 आकार का कट आउट |)

PART C

TOPIC: INTERNATIONAL YEAR OF COOPERATIVES

The 2025 United Nations International Year of Cooperatives (IYC2025) theme will be Cooperatives Build a Better World, showcasing the enduring global impact cooperatives have everywhere. This theme highlights the cooperative movement's ability to promote social inclusion, economic empowerment, and sustainable development.

TASK 1:

Design a membership card using geometric shapes and symmetry for your cooperative on an A4 sheet. The card should include the cooperative's name, member's name, a unique number written using Roman numerals, and a small logo designed using geometric shapes and symmetry. Think about how math is used in numbering, shapes, and layout. Use colours and patterns to make the card visually appealing while keeping the design simple and clean.

TASK 2:

On an A4 sheet create a colourful bar graph to display the number of members in five types of cooperative societies:

Farmers' Cooperative: 120 members (Green bar)

Dairy Cooperative: 180 members (Blue bar)

Credit Cooperative: 150 members (Orange bar)

Handicraft Cooperative: 90 members (Purple bar)

Fishermen's Cooperative: 110 members (Red bar)

Choose an appropriate scale, and clearly mention the scale on the graph. Use colour pens to make the graph vibrant.

TASK 3:

Create a colourful crossword puzzle on an A3 sheet that combines Math's vocabulary and terms related to cooperative societies. Use sketch pens, coloured paper, and decorative borders to make your crossword vibrant and engaging! Use at least 5 Maths terms (e.g., percentage, ratio, profit, average, graph).

and at least 3 terms related to cooperatives (e.g., society, share, member). Number your clues clearly as Across and Down. On a separate A4 sheet, write your clues.

TASK 4:

On an A3 sheet, design a bright and fun front page of a Math Newspaper on the theme: "Cooperation + Calculation = Success!". Think of a creative newspaper name (e.g., Math Mirror, The Number Times). You may Include: A main headline on the theme.

A main headline on the theme.

A short story about kids working together and using math.

A comic strip, math tip box, or riddle.

Use colour pencils, sketch pens, borders and math/cooperation drawings (calculators, coins, team of kids, hands joined) to make front page of a Math Newspaper creative.

TASK 5:

As part of celebrating the International Year of Cooperatives, design a bookmark in the shape of a Mathematical figure such as a rectangle, triangle, or circle. Also calculate its area and perimeter using appropriate formulas. Decorate your bookmark with artwork or symbols that represent cooperatives (like teamwork, farming, local businesses, shared resources, etc.). Use colours, patterns, and your creativity to design your bookmark.

PART D

TOPIC: QUANTUM SCIENCE AND TECHNOLOGY

The United Nations General Assembly declared 2025 as the International Year of Quantum Science and Technology to promote global collaboration in Quantum Science and Technology. The word quantum originates from the idea that physical properties, such as energy, are not continuous but rather exist in specific or quantized amounts. A quantum is the smallest possible unit of a physical property. For example, a photon is a quantum of light.

The principles of quantum mechanics are used in developing new technologies in the fields of communication, security, healthcare, and computing. The tasks are crafted to encourage curiosity, creativity, and independent thinking, while also helping students build essential skills such as research, communication, and problem-solving.

TASK 1: Make a Model of an Atom

Create a colorful paper model of an atom using simple materials like beads, buttons, paper cutouts, and string. Show protons, neutrons, and electrons clearly. Label all the parts neatly.

Link for reference

https://youtu.be/lw6AsvprS0w?feature=shared

TASK 2: Vocabulary Flashcards set on Heat

Learn and remember important words from the chapter "Heat" by making your own set of 10 fun and creative flashcards.

- On **one side**, write one important word from the chapter (like Temperature, *Thermometer*, *Conduction*, *Convection*, Radiation, etc.).
- On the **other side**, write a **simple meaning** of the word and draw a **small picture** to show what it means.

Size- 5 inches x 5 inches

TASK 3: Poster on "Quantum Computers vs Classical Computers"

Create a colorful poster comparing Quantum Computers and Classical Computers. Use simple diagrams, bullet points, and facts to show how quantum computers are faster and smarter.

Size -A3, Orientation- Landscape

Link for reference: https://youtu.be/JhHMJCUmq28 Google search

TASK 4: Create a Comic Strip – "Story of an Atom"

Draw a fun comic strip (6–8 frames) on the Story of an Atom. Add **colourful drawings, speech bubbles**, and **labels**. Keep the language simple and fun. Be creative! You can invent your character like *Atom Girl*, *Electron Eddie*, or *Neutron Nia*.

Link for reference: https://youtu.be/jMW_0Ro6b5c?feature=shared https://youtu.be/9qcw4awq81o?feature=shared https://youtu.be/R1RMV5qhwyE?feature=shared

TASK 5: Design a Bookmark on a famous Physicist and his/her discovery.

Create two **bookmarks** that feature a **famous physicist** and highlight their important discoveries. You have to find out how these scientists contributed to the field of physics and its impact on our daily lives. Some examples are:

- Albert Einstein (Theory of Relativity)
- Marie Curie (Discovery of Radioactivity)
- Isaac Newton (Laws of Motion, Law of Gravity)
- Nikola Tesla (Alternating Current, Electric Power Systems)

Size- 9 inches x 3 inches

Front Side of the bookmark:

- Write the name of the physicist.
- Include a small **portrait or image** of the physicist.
- Add the date of their birth and death.

Back Side of the bookmark:

• Write a **short description** of their key discovery. **Make it colourful**

PART E

TOPIC - "GLACIERS" LESSON - CLIMATES OF INDIA

☑ Task 1: 3D Glacier Diorama – "Frozen Landscapes"

Glaciers are massive, slow-moving rivers of ice found in the highest mountains of India, especially in the Himalayas. They are a vital source of freshwater and shape the land around them over time. In this task, you will creatively build a 3D model of a glacier and its surrounding features.

How to do it:

Create a 3D model showing a Himalayan glacier. Show snowy mountains, glacial lakes, meltwater streams, moraines, and vegetation. Label each feature with small flags or cards. Try to arrange the landscape naturally to show how ice melts and flows downward. Dimensions - Length: 13 inches, Width: 15-29 inches and Height - 22 inches.

Materials Required: Cardboard base, clay, cotton, paper, glue, paints, toothpicks (for labels). Link: <u>https://youtube.com/shorts/GCq0_ocz4As?si=FiFi7R13W2r99TJy</u>

☑ Task 2: Glacier Quest Snakes and Ladders – "Guardians of the Ice" (Toy-Based Adventure)

Join an exciting mission to protect Himalayan glaciers with this Snakes and Ladders game. Objective: Create an interactive Snakes and Ladders board game to know about glaciers and their influence on India's climate through eco-friendly actions and challenges.

Task Description: Design a Snakes and Ladders game titled "Guardians of the Ice," where players are ecowarriors striving to save Himalayan glaciers. Craft a 40x30 cm cardboard board with a 10x10 grid (100 numbered squares), illustrating a glacier, rivers (e.g., Ganges), and Indian landscapes like monsoon plains and farms. Include 5 ladders (representing conservation actions, e.g., planting trees) and 5 snakes (representing climate threats, e.g., pollution). Players roll a dice to move across the board. Landing on a ladder's base allows players to climb up (e.g., for eco-friendly actions), while landing on a snake's head sends them sliding down (e.g., for climate setbacks). The first player to reach square 100 wins by "saving the glacier." Dimensions - Length: 13 inches, Width: 15-29 inches

• **Materials:** Use cardboard for the board, bottle caps or stones as player tokens, colored paper for quiz cards, recycled materials for a dice, and decorative items like cotton, fabric scraps, and paint for 3D effects.

Link: https://youtu.be/uCIrruRuURU?si=GDUw-9vTWxFRxmpo

✓ Task 3 : Storyboard – "A Day in the Life of a Glacier"

Have you ever imagined how a glacier would feel if it could speak? In this activity, you will give a glacier a voice and bring it to life by drawing a creative comic-style storyboard. This task will help you understand the life and struggles of glaciers from a personal point of view, while exploring environmental issues.

How to do it:

- 1. Take an A3 sheet and divide it into 4 to 6 equal frames using a ruler.
- In each frame, draw and write a short part of the glacier's story, such as: Frame 1: "I was born high in the Himalayas, layer by layer from falling snow..." Frame 2: "For centuries, I stayed strong, carving valleys and feeding rivers..." Frame 3: "But now, I feel myself shrinking each summer..." Frame 4–6: "Pollution and rising temperatures are melting me... Please help me survive!"
- 3. Add a name to your glacier (e.g., Golu the Glacier).
- 4. Use expressions, speech bubbles, and symbols like the sun, trees, and water droplets to illustrate emotions and actions.
- 5. Make it colorful, neat, and creative. Keep the writing short and impactful. Materials Required: A3 sheet or chart paper, pencil and eraser, Black pen (for outlining), ruler (for dividing frames), crayons, sketch pens or colored pencils.

Task 4: Glacier Facts Wall Art – "India's Icy Guardians" (Wall Hanging Craft) Celebrate the vital role of Himalayan glaciers in India's climate with this creative wall hanging project. Craft a visually striking wall hanging that presents key facts about glaciers and their significance to India's climate.

Task Description: Create a wall hanging titled "India's Icy Guardians" using a sturdy cardboard or wooden base (30x40 cm) as the backdrop. Cut out 6 shapes (e.g., snowflakes, clouds, rivers, mountains, or cultural symbols like a lotus or mango) from colored or shiny/translucent paper. Write one glacier-related fact on each shape (minimum 6 facts) using a marker. Examples include: "Himalayan glaciers store 70% of India's freshwater" or "Glacier melt disrupts monsoon rainfall." Attach shapes to the base with strings or glue, arranging them to create a layered, cascading effect. Add a loop or hook at the top for wall mounting.

• **Materials:** Use cardboard or a wooden board for the base, colored or shiny/translucent paper for shapes, strings or threads, glue, scissors, markers, and optional decorations like glitter, stickers, or paint.

Link: https://youtube.com/shorts/QN9yNohsoYs?si=2MW6YUSkNr_daj7

✓ Task 5: Glacier Conservation Survey – "Saving Our Glaciers" (Community Research)

Glaciers are India's water towers; but climate change is melting them. Design a straightforward survey, based on a provided sample, to learn how neighborhood families help prevent glacier melting, and present findings creatively.

Task Description:

• Activity: Create a survey titled "Saving Our Glaciers" to find out how neighbors use eco-friendly practices to reduce climate change, which causes glacier melting. A sample survey form with 5 questions about actions that protect glaciers is given below. Draw your own survey form on A4 paper, copying the sample's table format. Visit 5 neighborhood families, ask for permission, and get them to fill in the survey (or record their answers). Collect their family name, house number, colony, and responses (Yes/No). Summarize the results on a colorful A3 poster using a chart and graphically represent the responses for each of the questions. Write a short 50-word note on the poster explaining how these actions help glaciers and India's climate.

• Materials: A4 paper (survey form), A3 sheet (poster), colored pens/markers, ruler, optional decorations (e.g., stickers, glitter) for the poster.

PROTECTING OUR ICE: GLACIER CONSERVATION SURVEY

STUDENT NAME:

FAMILY NAME	HOUSE NO.	COLONY	Q.1 Do you use an electric vehicle (EV) OR prefer cycling/walking to reduce fuel emissions? YES/NO	Q.2 Are you energy smart, using LED bulbs or turning off unused appliances? YES/NO	Q.3 Do you practice water conservation, like fixing leaks or using less water daily? YES/NO	Q.4 Do you avoid single- use plastics(e.g., straws, bags) to reduce pollution and use jute bags for shopping? YES/NO	Q.5 Do you participate in community clean- up drives to protect environment? YES/NO

PART F (To be done as per your third language)

FRENCH

Task 1- Design five Glacier greeting cards of size A4 with a beautiful message in French language on "Save us before we melt". Give your card an icy and frosty look.

Task 2- Create an insightful picture book of size A4 comprising on five pages showcasing human activities for melting the glaciers with inspiring messages in French language on how can we stop them. Design your book in a shape based on theme of glaciers.

Task 3- Prepare an itinerary of two days for a tourist who is visiting Mer de Glace- an attractive valley glacier in French Alps. Display your itinerary with eye-catching beauty of that place in a form of brochure of size A4.

Task 4- Prepare five items to be carried in a travel bag while going in cold places, you can create items/props using newspaper or waste resources. Label each item in French with neat and clear captions.

Task 5- Create one captivating and impactful illustration of size A3 to raise awareness about glacier loss with an inspiring message in French language.

SPANISH

Tarea 1: Roll Numbers: 2, 5, 8, 11, 14, 17, 21, 25, 28, 31, 34, 37, 38 **Tarea 2: Roll Numbers:** 1, 3, 6, 9, 12, 15, 18, 22, 26, 29, 32, 35, 36 **Tarea 3: Roll Numbers:** 4, 7, 10, 13, 16, 19, 20, 23, 24, 27, 30, 33

Tarea 1: Artistic Glacier Diorama or 3D Model - "El Glaciar en mi Mundo"

Objective: Create a 3D model or diorama of a famous glacier from a Spanish-speaking country (for example, Perito Moreno in Argentina or Glaciar San Rafael in Chile). Add elements of Spanish culture (like traditional clothes, flags, local wildlife, or regional symbols) around the glacier to show connection.

Dimension: rough idea Length (L): 30 cm (12 inches) Breadth/Width (B): 30 cm (12 inches) Height (H): 30–45 cm (12–18 inches) or can be of your own choice but presentable.

Instructions:

- * Use clay, recycled items, cardboard, or any craft material.
- * Include a short written description in Spanish (5–6 lines) about:
- * The name of the glacier.
- * Country it belongs to.
- * Why it is important.
- * A cultural fact from that country.
- * Decorate it creatively with snow effects, labels in Spanish, etc.

Language Skill Focus: Vocabulary related to nature, geography, countries, and basic sentence formation in Spanish.

Tarea 2: Creative Poster or Painting – "La Leyenda de un Glaciar" (The Legend of a Glacier)

Objective: Imagine and illustrate a myth or legend about how a glacier was formed, but connect it to a Spanish-speaking country's folklore or traditions.

Instructions:

* Create a colorful poster/painting/collage that tells a short imaginary story or legend about a glacier.

* The story must be written in Spanish (8–10 lines).

* Include cultural elements (like a legendary creature from Hispanic folklore, a traditional Spanish festival, etc.) as part of the story.

* You can give the glacier a name in Spanish and make it a character in your story.

Language Skill Focus: Storytelling, adjectives, and cultural vocabulary in Spanish.

Tarea 3: Spanish Magazine Article

* Write a one-page article in Spanish about a famous Spanish-speaking celebrity or historical figure. Describe their life, achievements, and why they are significant.

* Use an A4 sheet and include a picture of the person.

Reminder:

* Projects must be presentable and neat, labeled clearly in Spanish
* Try to use your own imagination, creativity, and love for art to make it stand out!

* You may take inspiration from real glaciers but add your own twist to reflect Hispanic culture and Spanish vocabulary.

SANSKRIT

Worksheet to identify steps of a project (An interdisciplinary approach) Main Topic: हिमशैलस्य संरक्षणम: परमावश्यकम

H.H.W given in brief: पञ्चतत्त्व (पृथ्वी, जल, अग्नि, आकाश, वायु)–प्राणतत्व एव: - विषय के आधार पर निर्देशानुसार कार्य कीजिए |

वर्ग 1.पञ्च तत्त्वों के कट आउट अथवा मॉडल पर पञ्च तत्त्वों के संस्कृत में नाम के साथ आकर्षक प्रस्तुति दीजिए (सामान्य आकार का कट - आउट लगभग 12 X 12 इंच)

वर्ग 2. पञ्च तत्त्वों में से किसी एक तत्त्व के संरक्षण पर आधारित सचित्र आकर्षक एवं ज्ञानवर्धक सुक्तियुक्त पोस्टर बनाएँ । (ए-3 आकार के कागज पर)

वर्ग 3. पञ्च तत्त्वों का संरक्षण कितना आवश्यक है विषय आधारित एक स्वचयनित टेबल पर रखे जाने योग्य मॉडल बनाएँ जिसमें पञ्च तत्त्वों की एक उपयोगिता एवं उनके संस्कृत नाम को झंडियों पर प्रदर्शित करें। (ए-3 आकार के गत्ते पर)

वर्ग 4. पञ्च तत्त्वों अथवा उनसे जुड़ी वस्तुओं (जैसे :- पहाड़ , नदी , झरना , पृथ्वी , नल से टपकती बूँद , बादल आदि) के कट आउट पर अथवा स्वेच्छित कट – आउट पर (टेबल पर रखे जाने योग्य हो। पञ्च तत्त्वों में से प्रत्येक तत्त्व के विलोम शब्द লিखिए। (ए - 3 आकार का कट आउट |)

वर्ग 5. पञ्च तत्त्वों अथवा उनसे जडी वस्तओं पर आधारित दो तोरण बनाएँ तथा उन पर उनसे संबंधित पर्यायवाची लिखिए । (लम्बाई x चैडाई x ऊँचाई- 12 x 4 x 4 इंच)

PART G

• TASK 1: Students are required to create a Web Page on theme "Applications of Quantum Technology".

OR

• TASK 2: Students are required to create a Podcast / Radio Show on the theme: "How to be safe in Cyber World?" representing a short story. The duration of the podcast or radio show should be between 2 to 5 minutes, ensuring the content is concise yet impactful.

OR

• **TASK 3:** Design a Paper Poster on "Artificial Intelligence: Future of Smart Homes". The design should be created on an A3 size sheet to ensure proper space for visuals and text.

Note: Share the podcast in mp4 format / webpage on the email ID given below: computerassignments@svisgdelhi.com with your name, class and section in the subject line.