

NEW ERA PUBLIC SCHOOL.DWARKA
HOLIDAY HOMEWORK
SESSION : 2026-27
CLASS: X

ENGLISH

Interview Project – Class 10 English

Topic: “*Learning from Real Lives*”

Objective:

This activity aims to help students develop:

- communication skills,
- listening skills,
- confidence,
- empathy,
- and reflective thinking through real-life conversations.

Students will interview a person from an older generation or a professional field to understand how life, education, technology, and careers have changed over time.

Instructions for Students

Step 1: Choose Any ONE Person to Interview

You may interview:

- Grandparents
- Parents
- Neighbours
- Teachers
- Doctors
- Shopkeepers
- Drivers
- Domestic workers
- Office professionals
- Artists
- Entrepreneurs

Step 2: Select ONE Theme

Choose any one topic:

A. Education Then and Now: Compare school life in the past and present.

B. Challenges During Childhood: Understand struggles faced during earlier times.

C. Technology Changes: Explore how technology transformed daily life.

D. Career Journey: Learn about professional experiences, failures, and success.

Step 3: Prepare Interview Questions

Students should frame polite, open-ended questions on the basis of the theme selected. Use those questions for your interview.

Step 4: Write the Responses

Students may write responses in question-answer format.

Step 5: Reflection / Conclusion

Students must write a reflection paragraph of about 150–200 words.

They should include the following points:

- What they learnt from the interview
- What inspired or surprised them
- Similarities/differences between generations
- Values they understood
- Personal thoughts

Sample Reflection

This interview helped me understand how different life was for earlier generations. I realised that people managed difficulties with patience and determination despite limited resources. I was especially inspired by the importance they gave to hard work and relationships. Comparing their childhood with mine made me appreciate modern opportunities and technology more responsibly. The interview also improved my confidence and listening skills.

Creative Presentation Ideas

Students may present the project as a Report file. You may also include photographs

Format for Submission

Cover Page

- Title of project
- Student name
- Class & section
- Submitted to

Index

Introduction

Briefly explain:

- whom you interviewed,
- why you chose them,
- and the topic selected.

Interview Questions & Responses

Reflection / Conclusion

- whom you interviewed,
- why you chose them,
- and the topic selected.

Interview Questions & Responses

Reflection / Conclusion

HINDI

सिक्किम-कला बुकमार्क

कार्य: सिक्किम की पारंपरिक 'थांगका' (Thangka) चित्रकला या वहाँ के प्राकृतिक सौंदर्य से प्रेरित 2 आकर्षक बुकमार्क तैयार करें।

निर्देश:

1. **बनावट:** मोटे चार्ट पेपर या कार्डबोर्ड को बुकमार्क के आकार (लगभग 2x6 इंच) में काटें।
2. **चित्रकारी:** एक बुकमार्क पर **सिक्किम का राजकीय फूल (ऑर्किड)** और दूसरे पर वहाँ के **पहाड़ों या झंडों** का सुंदर चित्र बनाएँ।
3. **लेखन (हिंदी):** बुकमार्क के एक तरफ हिंदी का कोई **प्रेरक विचार** लिखें।
4. **सजावट:** ऊपर की तरफ एक छेद करके रंगीन धागा या ऊन बाँधें।

MATHEMATICS

For Roll Nos. 1 to 9

- **Area of Sphere Project:**

Using the model shown in the reference, prepare a creative 3D model to demonstrate the surface area of a sphere and explain its real-life applications.

Reference Link: <https://youtu.be/UgYhVJiu5w4?si=iuXkhCm2ZNUJ2VPb>

For Roll Nos. 10 to 18

- **Area of Circle Project:**

Design an activity-based project to verify the formula for the area of a circle by dividing it into sectors and rearranging them into a rectangular shape.

Reference Link: [📌 https://pin.it/18VQd0oZM](https://pin.it/18VQd0oZM)

For Roll Nos. 19 to 27

- **Clinometer Project:**

Construct a working clinometer using simple materials and use it to measure the height of a tree or building in your surroundings. Record the observations and calculations.

Reference Link: <https://pin.it/1TA3JGDnw>

For Roll Nos. 28 to 36

- **Pythagoras Theorem Project:**

Prepare an activity/model to prove the Pythagoras Theorem using geometrical shapes as demonstrated in the reference video.

Reference Link: <https://pin.it/5uqwEmDeJ>

For Roll Nos. 37 to 47

- **Total Surface Area of Cone Project:**

Prepare a model verifying and explaining the formula of area of cone.

Reference Link: <https://youtu.be/MSSsDlr3bqw?si=yRgsVgGGGNVlfDcR>

- Students are instructed to complete the Holiday Homework worksheets of Chapters done in class available on Edu next in a separate notebook neatly and systematically.

SCIENCE

TASK-1 (ECO-AVENGERS)

Demonstrate great citizenship by not just being responsible citizens but super heroes “ECO AVENGERS”. As an informed and concerned citizen, it is our responsibility to know our environment and keep looking for innovative ideas to conserve it. Prepare a powerpoint presentation based on the given topics to highlight the significance of preserving and nurturing our environment.

Roll no. 1-12 : ECOSYSTEM AND INTERDEPENDENCE

Roll no. 13-24: TROPHIC LEVELS AND FLOW OF ENERGY

Roll no. 25-36: POLLUTION AND OZONE DEPLETION

Roll no. 36- 47 : WASTE DISPOSAL AND MANAGEMENT

General instructions for making powerpoint presentations:

- Each student needs to prepare an individual presentation as per the assigned topic.
- The presentations should not have more than 15 slides.
- The presentation should include introduction, illustrations, eye-catching captions, research analysis, associated problems and solutions and a summary/ concluding slide.

TASK : 2

Exploring Science Through Photography

As part of the planned Science week activities (Science Safari), you all are expected to explore Science concepts and showcase your work that merges science with art: "Exploring Science Through Photography."

Let your creativity shine! Feel free to experiment with editing techniques, collage layouts, or any other artistic elements that enhance the presentation of your work. Experiment with different angles, lighting conditions, and subjects to showcase the phenomenon effectively. You can arrange them in a visually appealing manner, accompanied by captions or brief descriptions explaining the science behind each image.

Topic Selection: Choose one or more Science concepts (reflection, refraction, Tyndall effect, dispersion, or image formation) to explore through photography. You can focus on a single concept or combine multiple concepts in your photographs.

Submission: Submit your printed work on A3 or A2 photo paper on the first day of school after the holidays. Make sure your name and class are clearly written on each submission.

SOCIAL SCIENCE

Sustainable development is the need of the hour, as the world faces challenges like climate change, pollution, resource depletion, and inequality. It is important for each one of us, especially young citizens, to understand how our choices impact the planet and future generations.

As part of this project on Sustainable Development, you are required to explore its meaning, causes of unsustainable growth, and its effects on people and the environment.



NOTE- You will need to complete the following for your holiday homework on Disaster Management and Sikkim.

1. Scrapbook Presentation
2. Model

PART 1

Instructions for Project File:

- **Handwritten work** only, to be done neatly in a **scrapbook**.
- The project should be **20–25 pages long** (excluding cover and index).
- Use headings and subheadings.
- Paste **colourful pictures**, use **maps** and **graphs** wherever relevant.
- Maintain **neatness and creativity** – use headings, bullets, and borders.
- Add a **cultural collage** or **poster**.
- Submit on the **first day after vacation**.

Project Structure

1. Cover Page
2. Acknowledgement
3. Certificate
4. Index page
5. Introduction
 - Briefly introduce what the project is about.
 - Explain the purpose of the project and why sustainability matters.
6. What is Sustainable Development?
 - Define the term.
 - Explain its meaning with simple examples.
 - Include visuals if possible (e.g., diagrams, infographics).
7. Historical Background
 - Discuss when and how the idea of sustainable development originated.
 - Mention important events like the Brundtland Commission Report (1987), Rio Earth Summit (1992), etc.
8. Examples of Sustainable development
 - Provide 4–5 real-life examples from daily life, agriculture, industries, cities, etc.
 - Include pictures or charts.
9. Why is sustainable development important?
 - Explain the need for sustainability in today's world.
 - Link it with problems like climate change, pollution, poverty, etc.
10. The pillars of Sustainable Development
 - Write about the three main pillars:
 1. Economic sustainability
 2. Social sustainability
 3. Environmental sustainability
 4. Include a neat diagram.
11. Sustainable Development in India
 - Mention government initiatives (e.g., Swachh Bharat Abhiyan, National Solar Mission, Smart Cities Mission).
 - Highlight progress and challenges.
12. Sustainable Development Goals (SDGs)
 - List and briefly explain the **17 SDGs** set by the United Nations.
 - You may present them in a tabular or infographic format.

13. Challenges in achieving Sustainable Development Goals.

- Discuss obstacles like:
 1. Poverty
 2. Lack of awareness
 3. Industrialization
 4. Policy implementation issues

14. Outcomes of Sustainable Development- Highlight the benefits: clean environment, better health, economic growth, equality, etc.

15. Conclusion

16. Bibliography

- **Creative Art Integration (Compulsory)**

You must include **any one** of the following activities in your project file on Sustainable Development:

1. Poster: “Small Steps Towards a Sustainable Future”
2. Collage: Images of Sustainable Practices (e.g., solar energy, recycling, clean transport, etc.)
3. Model: Eco-friendly House or Smart Sustainable City
4. Comic Strip: “A Day in the Life of an Eco-Warrior”

NOTE- If you have chosen model making under the “Creative Art Integration (Compulsory)” section, you need to make a separate model on either Eco-friendly House or Smart Sustainable City.

PART 2

Instructions: Continue this project in the same scrapbook neatly and creatively. Use headings, pictures, charts, graphs, and relevant data wherever required. Students should write in their own words and maintain proper presentation.

- **Clean Energy: Solar Initiatives in Sikkim**

Clean energy plays a vital role in sustainable development by reducing pollution and conserving nature. Solar energy is one of the most useful and eco-friendly renewable energy sources. Sikkim has taken several steps to promote solar power and reduce pollution.

Students are required to:

- Research solar energy initiatives taken by Sikkim.
- Include information on:
 - Government schemes
 - Solar panel installations
 - Solar street lights
 - Public awareness programs
 - Use of solar energy in rural and tourist areas
- Explain the environmental impact of solar energy.

- Mention problems faced in implementing solar projects.
- Suggest solutions to improve clean energy use in Sikkim.
- Use images, charts, graphs, or data to support the project.
- Conclude by explaining how solar energy can help Sikkim achieve sustainable development.

ARTIFICIAL INTELLIGENCE

Make a Practical File (typed in word) for the following Python programs with output.
(with a cover page)

1. Write program to add the elements of the two lists.
2. Write a Python code to take the input of a number n and then find and display its factorial (n!). for e.g. $5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$
3. Write a program to input a string and display the string in the reverse order.
4. Write a program to input a string and display the count of vowels and consonants in the string.
5. Write a program to input a number and display whether it is a palindrome or not.
6. Write a program to input a number and display whether it is a prime number or not.
7. Write a program to input two numbers and swap both the numbers without using the third number,
8. Write a program to calculate mean, median and mode using NumPy of the following list of distance travelled by a car in a week.
9. Write a Python code to input the lengths of the three sides of a triangle and display whether a triangle will be scalene, equilateral or isosceles triangle.
10. Using NumPy package. Create an array of 5 marks and display the average of all marks.

Activity:

Create a poster on A3 size sheet: “**AI Tools Around Us**”

How AI is used in daily life:

- Voice assistants (Roll no. 1-10)
- Recommendation systems (Roll no. 11-20)
- Self-driving cars (Roll no. 21-30)
- AI chatbots (31- 40)
- Medical diagnosis (Roll no. 41-37)

Your poster should include:

- Name of the AI Tool.
- What the tool does?
- How it is useful in daily life. (2 - 3 points)
- 1- 2 Images or diagrams.
- Advantages and disadvantages of AI tool.
- A short slogan or TAG LINE.

Note: Do not copy directly from the Internet. Write in your own words.

ELEMENT OF BUSINESS

Learn chapter-1 and 2 and attempt the following questions in your class note book.

Chapter: Joint Stock Company

1-Mark Questions (Answer in one sentence):

1. Define a joint stock company.
2. Who are the owners of a joint stock company?
3. Name any two types of companies.
4. What is meant by the term "limited liability"?

3-Mark Questions (Answer in 30-50 words):

1. Explain any three features of a joint stock company.
2. Distinguish between private company and public company (any three points).
3. Mention three advantages of a joint stock company.
4. What is meant by perpetual succession?

4-Mark Questions (Answer in 60-80 words):

1. State four limitations of a joint stock company.
2. Explain any four features of a public company.
3. List four merits of a joint stock company.

6-Mark Questions (Answer in 100-150 words):

1. Distinguish between private and public companies on the basis of:
 - Number of members
 - Transferability of shares
 - Minimum capital
 - Invitation to public
-

Chapter: Ownership Funds and Borrowed Funds

1-Mark Questions (Answer in one sentence):

1. What are ownership funds?
2. Give two examples of borrowed funds.
3. What is retained profit?
4. Define equity shares.
5. What is a debenture?

3-Mark Questions (Answer in 30-50 words):

1. Differentiate between ownership funds and borrowed funds (any three points).
2. Explain any three features of preference shares.
3. Mention any three merits of equity shares from a company's point of view.

4-Mark Questions (Answer in 60-80 words):

1. What are borrowed funds? Explain any three sources with examples.
2. Differentiate between equity shares and preference shares.