

New Era Progressive School Korba

Holiday Home Work

Class - XI

ENGLISH

PPT Presentation

Objective of the Task

- To understand the chapter beyond the textbook
 - To explore themes, ideas, and real-life connections
 - To develop research, creativity, and presentation skills
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Task: PPT Presentation

Students will prepare a PowerPoint Presentation (10–15 slides) on **any one chapter from Hornbill or Snapshots**, based on their interest, with beyond-the-text exploration.

Structure of the PPT (Slide-wise Instructions)

1. Title Slide

- Title of the chosen chapter
 - Student Name
 - Class & Section
 - School Name
 - Subject Teacher's Name
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2. Introduction Slide

- Brief introduction of the chapter
 - Author's name
 - Background/context of the chapter
-

3. About the Chapter

- Summary of the chapter
 - Key characters/events (if applicable)
-

4. Theme and Message

- Main theme(s) of the chapter
 - Message or lesson conveyed
-

5. Character Sketch / Key Elements

- Character sketch (if applicable)

OR

- Important concepts/events
-

6. Beyond the Text (Core Requirement)

- Real-life connections
 - Additional research related to the topic
 - Similar events, examples, or case studies
-

7. Creative Element

- Your opinion / interpretation
 - Alternative ending / imagination-based idea
-

8. Visual Slide (Art Integration)

- Relevant images/drawings/diagrams
-

9. Interesting Facts

- Facts related to the chapter/topic/author
-

10. Conclusion

- What did you learn?
 - Why is this chapter relevant today?
-

11. References Slide

- Books
 - Websites
 - Any other sources used
-

Important Instructions

- Use simple and clear language
 - Add relevant images
 - Keep slides neat and not overcrowded
 - Use bullet points (avoid long paragraphs)
 - PPT should be creative and informative
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Instructions for Preparation of PPT

- The PPT must be prepared **individually by each student**.
 - Students must choose any one chapter from Hornbill or Snapshots.
 - The content should be original, well-researched, and not copied from the textbook / internet sources or from any other student.
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Submission Instructions

1. Prepare the PPT digitally
 2. Take a printout of the PPT slides
 3. Submit the printed copy in a file/folder as a record
 4. Be ready for presentation in class
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Assessment Criteria

- Content accuracy
- Creativity & presentation
- Research beyond textbook
- Neatness and organization
- Confidence during presentation

CORE MATHEMATICS

Instructions for Students

- Prepare an Art Integrated PowerPoint Presentation (PPT) on ONE of the 5 topics.
- This project is designed to cover the comprehensive syllabus of NCERT Chapters 1 and 2.
- Presentation duration: 5 minutes. Use your own words; do not read from slides.
- Submit the PPT in a pen drive after the summer vacation.

Project Topics (Choose ANY ONE)

- 1) Defining the Domain: Sets and Representations
Coverage: NCERT Exercise 1.1 and 1.2 (Basics & Types)
Theory: Definition of a Set, Roster vs. Set-Builder form, and types (Empty, Finite, Infinite).
 - **Korba Application:** Represent the set of all schools on RAMPUR ITI CHOWK in Set-Builder form. Identify if the set of grains of coal in a Gevra mine is Finite or Infinite.
 - Cricket Application: Create a Set of players who scored a century in the 2025 T20 series. Determine if this is a Null Set or a Singleton Set.
 - Art Integration: Sketch a visual gallery of "Sets in Daily Life" using local land - marks.
- 2) The Power of Structure: Subsets and Intervals
Coverage: NCERT Exercise 1.3 (Subsets, Power Sets, and Intervals)
 - Theory: Subsets, Proper Subsets, Power Sets, and Intervals as subsets of R.
 - Korba Application: Let U be the set of all employees in NTPC Korba. Define subsets based on departments (Engineering, Admin).
 - Cricket Application: Given the set of the Indian 15-man squad for 2025, calculate the total number of possible "Playing XI" subsets (2^n logic).
 - Art Integration: Design a "Power Set Tree" showing the hierarchy of student sections within NEPS.
- 3) Visualizing Logic: Operations and Venn Diagrams
Coverage: NCERT Exercise 1.4 and 1.5 (Union, Intersection, Complement)
 - Theory: Union (\cup), Intersection (\cap), Difference ($-$), and Complement (A'). NEPS Korba Class XI: Mathematics
 - Korba Application: Let A be the set of students using the Transport System and B be the set of students residing in Jamanipali. Find $A \cap B$.
 - Cricket Application: Use a Venn Diagram to show the intersection of players who played in both the 2025 IPL and the 2025 T20 International squad.
 - Art Integration: Create a large, colorful Venn Diagram poster using geometric shapes to represent set operations.
- 4) Cartesian Geometries: Products and Pairs
Coverage: NCERT Exercise 2.1 (Cartesian Products)
 - Theory: Ordered pairs, equality of pairs, and the Cartesian Product $A \times B$.
 - Korba Application: If $A = \{\text{Darri, Balco, CSEB}\}$ and $B = \{\text{Route 1, Route 2}\}$, list all elements of $A \times B$ to map the transport logistics.
 - Cricket Application: Calculate the Cartesian Product of 3 Batters and 2 Bowlers from the 2025 series to show all possible "Face-off" scenarios.
 - Art Integration: Draw a 2D coordinate grid representing the product of two sets of local coordinates.
- 5) Mapping the Hub: Relations and Functions
Coverage: NCERT Exercise 2.2 and 2.3 (Domain, Range, and Mapping)
 - Theory: Definition of a Relation, Domain, Codomain, Range, and the transition to a Function.

- Korba Application: Define a relation R where x is a Power Plant and y is its MW output. Test if this relation qualifies as a Function.
- (E) Activity: Create an arrow diagram mapping the roll numbers of 45 students to their final math grades. Identify the Domain and Range.
- Art Integration: Use silk threads or colorful wool on a board to create a physical “Mapping Model” of players to their 2025 strike rates.

Evaluation Criteria

- Accuracy: Correct use of mathematical symbols (\in, \subset, ϕ, \cup).
- Curriculum Depth: Evidence of covering all NCERT exercise concepts.
- Creativity: Effective integration of Korba and Cricket 2025 themes.

”Mathematics is the most beautiful and most powerful creation of the human spirit.”

APPLIED MATHEMATICS

Instructions for Students:

Students are required to prepare an Art Integrated PowerPoint Presentation (PPT) on the given topics.

- The PPT must be:
 - Saved in a pen drive
 - Submitted after summer vacation
 - Presented in the classroom (5 minutes presentation)
- Project Topics (Choose ANY ONE):
 - 1) Exponents in Real Life
 - 2) Logarithms and Their Applications
 - 3) Clock & Calendar Mathematics
 - 4) Work and Time (Real-Life Problems)
 - 5) Binary Number System and Its Uses
- PPT Content Guidelines:

(A) Introduction

- Meaning of the chosen topic
- Basic concepts and definitions

(B) Concept Explanation

- Detailed explanation of the topic

- Important formulas with examples
- Step-by-step solved problems

(C) Real-Life Applications

- Practical use of the topic in daily life
- Examples from real situations

(D) Art Integration

- Drawings
- Models (if possible)
- Make your PPT colorful and attractive

(E) Activity / Visual Representation

- Include at least one:
 - Graph / Chart / Table
 - Case study or practical example

(F) Conclusion

- Summary of your topic
- What you learned from the project

Presentation Guidelines:

- Duration: 5 minutes per student
- Speak clearly and confidently
- Do not read directly from slides
- Explain concepts in your own words

Submission Details:

- Submit PPT in pen drive
- Submission Date: After Summer Vacation

Evaluation will be based on:

- Content accuracy
- Creativity
- Presentation skills
- Neatness and organization

PHYICS

”Prepare a physics working model on a chosen topic, submit a 8–10-page report file, and present it after reopening.”

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Guidelines for Working Models

Objective

The project aims to:

- Reinforce classroom learning through practical application.
- Develop creativity, problem-solving, and research skills.
- Encourage independent and collaborative work.

Relevance: The model should be based on topics given in syllabus.

Feasibility: Ensure it can be built with easily available materials.

Originality: Innovate rather than replicate standard textbook models.

Documentation: Require a short report explaining the principle, construction steps, and applications etc

Assignment Format

1) **Model Construction:** Build and test the working model.

2) **Report (3–4 pages):**

- Aim and Theory/principle.
- Materials used.
- Construction steps.
- Observations and applications.

3) **Presentation:** Students present their model after reopening, explaining the physics behind it.

Submission

- Submit the written report on the first week after reopening.
- Models will be displayed and demonstrated in class.

CHEMISTRY

Prepare a detailed file on any one of the investigatory Projects from the given table.

S. No.	Topic of the investigatory project
1	Analyzing the acidity of different samples of tea leaves
2	Determining the rate of evaporation for different liquids
3	Water purification study
4	Study of foaming capacity of soap
5	Estimating the amount of vitamin C in various fruits and vegetable juices
6	Analysis of adulterants in food: Butter, Sugar and pepper powder.

BIOLOGY

Students are required to submit their project either as a written report in their notebook or as a poster.

1. The link between the cell cycle and cancer.
2. Cyclins & CDKs: The molecular engines.
3. Make a poster of Mitosis or meiosis.

ACCOUNTANCY

A) Complete Journal Project

- Create a full accounting cycle using journal entries:
- Start with a fictional business (e.g., “Sharma Stationery Store”)
- Record 20–30 transactions like:
 - Capital introduced
 - Goods purchased/sold
 - Expenses paid
- Show: Journal entries (with narration).

B) Cash vs Credit Transactions Journal

- Show difference between:
 - Cash transactions
 - Credit transactions

- Record both in journal with comparison

BUSINESS STUDIES

Market survey:

Visit to a Departmental store

The students are required to observe the following:

- a) Different departments and their lay out.
- b) Nature of products offered for sale.
- c) Display of fresh arrivals.
- d) Promotional campaigns.
- e) Spaces and advertisements.
- f) Assistance by Sales Personnel.
- g) Billing counter at store – Cash, Credit Card/ Debit Card, swipe facility. Added attractions and facilities at the counter.
- h) Additional facilities offered to customers
- i) Any other relevant aspect.
- j) Prepare a file on the basis of your observation.

ECONOMICS

Learn and write all the formula for arithmetic mean.

Observe the data of an economy of India of different states (minimum 8) in terms of GDP or population growth.

- Prepare a frequency distribution table for the above data.
- Prepare a bar graph or the above data.
- Prepare a histogram of the above data.

Note- Required data can be taken on imaginary basis depending upon the growth and development of our economy or on the basis of rapid population growth.

HISTORY

Topic: Write the comparative study “ –Life and achievement of Egyptian and Indus Valley People based on: - Location, timeline, town planning“.

Project Guidelines

- Write in History notebook
- Must be handwritten
- Map, Diagram, Pictures can be used
- Avoid Plagiarism

POLITICAL SCIENCE

Topic: Geopolitical Relations between Iran, USA and India

Assignment Questions

- 1) What is meant by geopolitics? Explain in 4–5 simple lines.
- 2) Briefly describe the main reasons behind the conflict between the USA and Iran.
- 3) Explain India’s role in the Iran–USA relations.
- 4) How do the Iran–USA tensions affect India?
- 5) In your opinion, what should India do in such international conflicts?

Mind Map (Compulsory)

Prepare a full-page colourful mind map on:
”Iran – USA – India Relations”

Include the following branches:

- USA–Iran Conflict
- India’s Role
- Importance
- Impact on India
- Your Opinion

Instructions

- The project should be within 10 pages including mind map
- Write in simple language and points
- Add pictures/drawings if possible
- Keep the work neat and well-presented

LEGAL STUDIES

Study the following case carefully and prepare a project based on it.

Case Brief

In **Church of God (Full Gospel) in India v. K.K.R. Majestic Colony Welfare Association (2000)**, a church located in a residential area was conducting prayers and religious services using loudspeakers and other sound-amplifying devices.

The use of these loudspeakers caused serious disturbance to the residents of the locality. The noise levels were reported to be beyond the permissible limits prescribed under environmental laws. The residents complained that their right to peaceful living was being adversely affected.

The local authorities attempted to regulate the use of loudspeakers. However, the church argued that such restrictions interfered with their fundamental right to practice and propagate religion.

The matter reached the Supreme Court, where the issue was whether the use of loudspeakers as part of religious practice could be restricted in order to protect the rights of others and maintain public peace.

Your Task

Prepare a **Case Study Project** based on the above facts.

Project Guidelines

- Write the project in a separate file
- Use simple and clear language
- Do not copy directly – write in your own words

Project Format

- 1) Introduction
- 2) Facts of the Case
- 3) Issues Involved
- 4) Constitutional Provisions Involved
- 5) Role of the Judiciary
- 6) Your Analysis (Opinion)
- 7) Conclusion

Make Your Project Attractive

- Create a colourful cover page (Title, Name, Class, Section)
- Use different colours for headings
- Use boxes/highlighters for important points
- Maintain neat handwriting and proper spacing

PSYCHOLOGY

Topic- Psychological Movie Analysis Project

Choose Any ONE Movie:

- 1) Taare Zameen Par (2007)
- 2) Inside Out (2015)

Project File Format

Your project must be handwritten in a file (A4 size sheets).
The project should be neat, well-organized, and creative.

Content Structure (Follow This Order)

- 1) Cover Page
- 2) Introduction of the Movie
- 3) Summary of the Movie
- 4) Identification of Psychological Problem
- 5) Causes Behind the Psychological Problem
 - Physical / Biological Causes
 - Social Causes
 - Mental / Psychological Causes
- 6) Intervention (According to You)
- 7) Personal Reflection
- 8) Conclusion

Project Guidelines

- 1) Minimum Length: 10–15 pages
- 2) Handwritten only
- 3) Neat presentation
- 4) Diagrams / Mind maps / Quotes can be added
- 5) Avoid copying from internet
- 6) Add some pictures related to movies

PHYSICAL EDUCATION

Topic: Traditional Sports and Regional Games for Promoting Wellness

General Instructions:

- 1) Complete the homework in A4 sheets (stick File)
- 2) Maintain neat handwriting and add colourful drawings or pasted pictures wherever required.
- 3) Follow the word limit strictly for written answers.

Q1. Answer the following questions in 80-100 words each:

- a) What is the role of students in promoting wellness through traditional sports and regional games?
- b) How can students actively participate in traditional and regional games to improve physical and mental wellness?
- c) Why is it important to preserve and promote traditional sports in the modern era?

Q2. Project Work: Traditional Games of India*

Select any five traditional/regional games from the table below and fill in the required details.

S.No	Name of the game	State where Popular	Basic Rules	How it Promotes wellness	Picture/ Drawing
1	Gilli Danda				
2	Lattoo				
3	Chaupar				
4	Maram Pitti				
5	Banta/ Kancha				
6	Posham Pa				

Q3. Interview Activity

Interview your grandparents or elders about one traditional game they used to play in their childhood. Record the details below:

S.No	Name of Elder &	Name of traditional	State / Region	Health benefits as
1				
2				
3				
4				
5				

Submission Date: 16/06/2026

COMPUTER SCIENCE (083)

- 1) Differentiate between: AI, Machine Learning, and Deep Learning. Use markers and colours to highlight differences amongst all
- 2) Differentiate between Interpreter and Compiler.
- 3) Make a chart to define the units to measure computer memory. Use markers and colours to highlight differences amongst all

ENTREPRENEURSHIP(066)

Topic: Prepare a detailed list of 10 Indian Entrepreneurs

KATHAK

- You are required to prepare a Kathak-based semi-classical dance of 3 minutes or less.