

ST. XAVIER'S SCHOOL

DHARAHARA, BALLIA (U.P.)

SUMMER ASSIGNMENT 2025 – 2026

CLASS X

SUBJECT			TOPICS
SCIENCE	BIOLOGY	→	1. Draw the well labelled structure of Heart/Kidney/Digestive system on chart paper.
		→	2. Solve the Previous years board questions of the first chapter from unsolved 😊.
		→	3. Make a project on Haemodialysis /Good or Bad Ozone Layer.
		→	4. Activity- To study the different parts of a flower by the Hibiscus flower.
		→	5. Activity- Write the procedure, observation, conclusion on Experiment showing that carbon dioxide is given out during respiration.
	CHEMISTRY	→	Solve previous five years question paper of C.B.S.E. Board.
	PHYSICS	→	Write detailed note on Dual Nature of light.
		→	Draw all the Ray diagram of Concave & Convex mirror with their characteristics.
		→	Solve all the numerical of NCERT & NCERT Exemplar. (Reflection of Light).
	SOCIAL SCIENCE	Make a Project file on the topic:	ANY ONE
		→	Consumer Awareness
		→	Sustainable Development
		→	A Social Issue

	HINDI	→	तुलसीदास तथा सूरदास का जीवन परिचय तथा रचनाओं का वर्णन (लगभग 800 शब्दों में) कीजिए।
	MATHEMATICS	Make a Project file on the topic:	
		→	1. Review the Fundamentals: <ul style="list-style-type: none"> • Real Numbers: Go through the Fundamental Theorem of Arithmetic, and understand how to find HCF and LCM using prime factorization. Also, review the concepts of rational and irrational numbers and their decimal expansions. • Polynomials: Understand the relationship between the zeroes and coefficients of a polynomial. Practice finding the zeroes of linear, quadratic, and cubic polynomials and learn about the division algorithm for polynomials. • Pair of Linear Equations in Two Variables: Focus on the different methods to solve pairs of linear equations: substitution, elimination, and cross-multiplication. Understand the graphical representation of these equations and the conditions for consistency/inconsistency. • Quadratic Equations: Learn how to factorize quadratic equations, solve them using the quadratic formula, and understand the nature of roots based on the discriminant. Practice solving word problems that can be framed as quadratic equations.
		→	2. Practice, Practice, Practice: <ul style="list-style-type: none"> • Solve NCERT Exercises: Make sure you've thoroughly solved all the examples and exercises in your NCERT textbook for these chapters. • Explore Additional Problems: Look for extra practice questions from other sources like RD Sharma, RS Aggarwal, or previous years' question papers (you've searched for question banks before, so this might interest you). • Focus on Challenging Problems: Try to solve higher-order thinking skills (HOTS) questions related to these chapters to deepen your understanding. • Real-Life Applications: Think about how these mathematical concepts are used in real-life situations. For example, linear equations can model various scenarios involving two quantities, and quadratic equations appear in physics and engineering problems.
		→	3. Project Ideas (Optional but Recommended for Deeper Learning): <ul style="list-style-type: none"> • Visualizing Number Systems: Create a chart or presentation illustrating the hierarchy of different types of numbers (natural, whole, integers, rational, irrational, real).

			<ul style="list-style-type: none"> • Graphical Solutions of Linear Equations: Plot graphs of different pairs of linear equations and analyze their intersections to understand the different types of solutions. • The History of Quadratic Equations: Research the history of quadratic equations and how they were solved in ancient civilizations. • Applications of Polynomials: Explore real-world applications of polynomials, such as in curve fitting or coding theory.
		→	4. Self-Assessment: <ul style="list-style-type: none"> • Regularly Test Yourself: After covering each chapter, try solving a few problems without looking at the solutions to assess your understanding. • Review Your Mistakes: If you get stuck or make mistakes, revisit the concepts and try to understand why you went wrong.
	INFORMATION TECHNOLOGY	Complete the following questions in a Project file	Q. 1- Discuss the pros and cons of Verbal Communication.
			Q. 2- Discuss the pros and cons of Written Communication.
			Q. 3- Discuss the pros and cons of Non- Verbal Communication.
			Q. 4- Discuss the pros and cons of Visual Communication.
			Q. 5-Explain the elements of communication with diagram.
			Q. 6-What are the types of feedback? Explain with example.
			Q. 7-What are the principles of Effective Communication?
			Q. 8- Discuss different barriers of Effective Communication.
			Q. 9-What is the importance of feedback in communication?
			Q. 10-Write the Parts of a Sentence with example.
			Q. 11-Write the Parts of Speech with example.

			Q. 12-What are styles and its categories?
			Q. 13-Name some properties of Images /Drawing objects.
			Q. 14-How is cropping different from scaling?
			Q. 15-Write 10 points on Do's and Don'ts of Body Language.
	ENGLISH	Make a Project file on the topic:	
		→	Section 1: Figures of Speech/Literary Devices
			For each device (Simile, Metaphor, Personification, Alliteration, Irony, Oxymoron, Repetition, Pun, Imagery):
			Write the definition.
			Provide one example from First Flight or Footprints Without Feet with explanation.
			Example: Personification: "The fog comes on little cat feet" (Fog, First Flight). Explanation: Fog is given cat-like movement, creating a vivid image.
		→	Section 2: Analytical Paragraphs
			Write 5 analytical paragraphs based on data, charts, or scenarios. Each paragraph should:
			Interpret the given data/scenario.
			Present a clear argument with evidence.
			Conclude with a summary or suggestion.
			Air Pollution Trends: Analyze a bar graph showing rising AQI levels in Delhi (2020–2024). Discuss causes (vehicles, industries) and suggest solutions (public transport, green initiatives).
			Student Mental Health: Interpret a survey showing 60% of students face stress. Highlight causes (exams, peer pressure) and propose counseling in schools.

		Plastic Waste Increase: Analyze data on single-use plastic consumption. Discuss environmental impact and advocate for bans.
		Literacy Rates: Interpret a chart showing improved rural literacy (2015–2025). Discuss government schemes and remaining challenges.
		Road Accidents: Analyze statistics on rising accidents. Highlight reckless driving and suggest stricter laws.
	→	Section 3: Letter Writing
		Write 5 formal letters (120–150 words each)
		Letter to Editor (Air Pollution): Highlight Delhi’s worsening air quality and suggest solutions like electric vehicles.
		Letter to Principal (Mental Health): Request workshops on stress management for students.
		Letter to Municipal Commissioner (Plastic Ban): Urge enforcement of a single-use plastic ban.
		Letter to Editor (Education Reform): Advocate for skill-based learning over rote memorization.
		Letter to Traffic Police (Road Safety): Request stricter enforcement of traffic rules to reduce accidents.