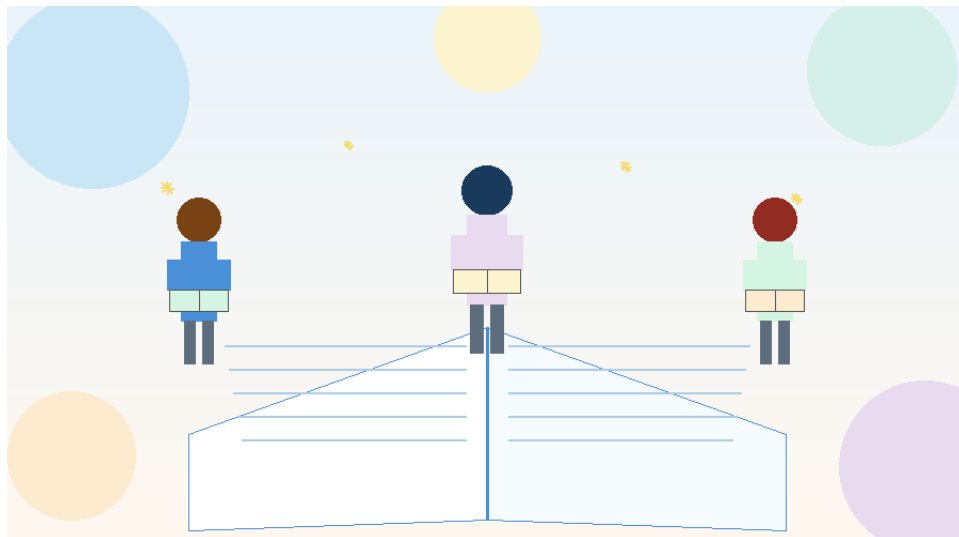




NOTRE DAME SCHOOL

HOLIDAY HOMEWORK

Class IX | Session 2026–27



Complete all tasks neatly and submit before the deadline.

ENGLISH

The English Portfolio will be shared by the class teacher in the class WhatsApp group. Kindly take a printout of the portfolio and complete all the questions neatly by following the instructions given carefully.

HINDI (हिंदी)

कक्षा अध्यापिका द्वारा व्हाट्सएप पर पोर्टफोलियो का पी.डी.एफ. भेजा जाएगा। उसका प्रिंटआउट निकालकर उसी में प्रश्नों के उत्तर लिखिए।

SOCIAL SCIENCE

S. No.	Task / Activity
1.	Read, revise, complete, and learn all the work done in class.
2.	Write a short note on sustainable development on an A4 size sheet.
3.	Make a mind map on the types of democracy on an A4 size sheet.
4.	Write a slogan on an A3 sheet on the topic: "Say No to Tobacco".

ARTIFICIAL INTELLIGENCE (AI)

S. No.	Task / Activity
1.	Write a short note on Artificial Intelligence and its applications in daily life.
2.	List 10 examples where AI is used around us.
3.	Prepare a chart on the advantages and disadvantages of AI.
4.	Create a PowerPoint presentation (5–6 slides) on the topic: "AI in Education".
5.	Research and write about any one AI tool such as ChatGPT, Google Assistant, or Siri.
6.	Make a poster on "Responsible Use of Artificial Intelligence".
7.	Learn basic AI-related terms: Machine Learning, Data, Algorithm, Robotics, and Automation.
8.	Write 5 ways in which AI can help students in their studies.

MATHEMATICS

S. No.	Task / Activity
1.	[Part A – Task 1] Number Systems – Real-Life Connection: The length of a diagonal of a square garden is $\sqrt{50}$ metres. Can this length be exactly measured with a scale? Why or why not? Approximate the value to 2 decimal places and justify your method.
2.	[Part A – Task 2] Polynomials: Draw the graph for any 15 polynomials on chart paper from the NCERT Book.
3.	[Part A – Task 3] Complete the first 10 practicals in the Mathematics Practical File.
4.	[Part B – Choose ONE] Option 1 – "Math Around Me" Scrapbook: Click or draw pictures showing mathematics in your surroundings (symmetry, angles, patterns, bills, architecture). Annotate each with the maths concept involved. Write a paragraph about how maths helps you understand your world.
5.	[Part B – Choose ONE] Option 2 – Mathematical Rangoli / Mandala Art: Create a design using only geometrical shapes and symmetry. Explain the mathematical properties used (e.g., angles, polygons, reflections).
6.	[Part B – Choose ONE] Option 3 – Design a Maths Board Game: Create a simple board game using Class 9 Maths concepts (polynomials, number systems, geometry). Include question cards, rules, and a playing board.
7.	[Part C] Revise all the chapters completed in class with examples.

SCIENCE — PHYSICS

S. No.	Task / Activity
1.	Draw the graph for different types of motion on a chart.
2.	[Project Option] Solar-Powered Water Purifier – What You Will Learn: Water purification and renewable energy. Materials Needed: Solar panel, heating coil, plastic bottle, filter. Difficulty: Intermediate. Build a system that purifies water using solar power, demonstrating clean energy and water conservation.
3.	[Project Option] DIY Microscope with Smartphone – What You Will Learn: Optics and magnification. Materials Needed: Smartphone, laser pointer lens, cardboard, glue. Difficulty: Easy. Turn a smartphone into a microscope to explore the microscopic world — a perfect mix of science and creativity.
4.	[Project Option] Water Quality Monitoring System – What You Will Learn: IoT and environmental monitoring. Materials Needed: Arduino board, pH sensor, turbidity sensor, display module. Difficulty: Intermediate. Create a system to test water quality and display parameters like pH and turbidity in real time.
5.	[Project Option] Line-Following Robot – What You Will Learn: Robotics and sensor-based navigation. Materials Needed: Arduino, IR sensors, motors, wheels, battery. Difficulty: Intermediate. Build a robot that follows a line, introducing programming and robotics concepts.
6.	Practical Work: Complete the first three practicals of Physics from the Science Lab Manual in the Practical File.

SCIENCE — BIOLOGY

S. No.	Task / Activity
1.	Learn and revise all the chapters completed in class.
2.	Portfolio sheets (use blue-coloured A4 size sheets): (a) Prokaryotic cell and eukaryotic cell. (b) Cell division — mitosis and meiosis.
3.	Write Biology practicals in your Practical File. (Practical Nos.: 1, 2, 8, and 9)
4.	Write an article on an A4 size sheet on the topic: "Mental Wellness".

SCIENCE — CHEMISTRY

S. No.	Task / Activity
1.	Learn and revise the chapter completed in class.
2.	Learn the names, symbols, atomic numbers, and valencies of elements.
3.	Portfolio sheets (use blue-coloured A4 size sheets): (a) Make Table 4.1 — Composition of atoms of the first 18 elements with electron distribution in various shells. (b) Laws of chemical combination with examples.
4.	Write Chemistry practicals in your Practical File. (Practical Nos.: 3(1), 3(2), 6, and 17)