

GRD WORLD SCHOOL, BHAUWALA, DEHRADUN

SUMMER VACATION HOLIDAY'S HOME WORK- 2025-26 CLASS - XI SCIENCE

S. No	Subjects	Topics
1	English	 1 Write a short note on 'Human life is short-lived in contrast to nature' (A Photograph) 2 Identifying and explaining the use of literary devices in the poem 'A Photograph'
2	Biology	 3D models (Mitosis and Meiosis) Morphology of Flowering Plants (Root, Leaf, Inflorescence and Flower) Solve NCERT back exercise Questions.
3	Physics	 Solve NCERT back exercise Questions of chapters 1 and 2 Solve the worksheets provided
4	Chemistry	The worksheet /(s) provided in the group
5	Maths	
6	Marketing	
7	Physical Education	
8	Computer Science	Complete the given worksheet.



GRD World School, Bhauwala, Dehradun Holiday Homework: Number System Class: XI Science

Subject: Computer Science

Part 1: Theory

1.	Define the following number systems with examples:

Binary Octal Decimal Hexadecimal

- 2. Explain the importance of number systems in computer science.
- 3. What is the base (radix) of each number system?

Part 2: Number System Conversions

Perform the following conversions **step-by-step** and show your work:

Task	Number
1. Convert decimal 156 to binary	156
2. Convert binary 110101 to decimal	110101
3. Convert octal 237 to decimal	(237)8
4. Convert hexadecimal 3F to decimal	(3F) ₁₆
5. Convert decimal 255 to hexadecimal	255
6. Convert binary 101011 to hexadecimal	101011
7. Convert hexadecimal 7A to binary	(7A) ₁₆
8. Convert decimal 100 to octal	100

Part 3: Bonus

- 1. Convert binary number 1101101 to octal and hexadecimal.
- 2. Explain why hexadecimal numbers are often used in programming and computer science instead of binary.

Submission

- Write answers clearly with steps.
- Use a notebook or type and print.
- · Submit before the first class after holidays.