WORLD WAY INTERNATIONAL SCHOOL
HOLIDAY ASSIGNMENT/PROJECT/RESEARCH
SESSION – 2026-2027
CLASS- 11 A

1	**ENGLISH**	CRITICAL THINKING + LOGICAL REASONING TASK Task: "Character on Test & Narrative Change" Work to Do: • Read a folk story from your paternal/maternal hometown OR any favourite story/movie • Write a brief summary (80–100 words) • Choose one main character Part A: Character on TEST • 2 points: Why the character was justified/right • 2 points: Why the character was questionable/wrong • Final judgment: What do you think? (50–60 words) Part B: Change the Story Logic • Identify one key event • Change it (different decision/action) Rewrite: • Original event • Modified event • How this change will affect: VALUE-BASED TASK Task: "From Media to Meaning" Work to Do: • Select a recent viral or reallife incident	VALUE-BASED TASK Task: "From Media to Meaning" Work to Do: • Select a recent viral or reallife incident • Identify one core value (e.g., empathy, honesty, courage) Write: • Brief description of the incident • One similar situation from a story or literature • One real-life application • What will happen if this value is ignored in society? Answer in 150–180 words with clear reflection	ART-INTEGRATED TASK Task: "Visual Story Analysis (ConceptBased)" Work to Do: Create a detailed visual page using Nagaland–Mizoram tribal art and folk motifs Your page MUST include: • Title of the story • 3 key scenes (drawn and labelled) • Character symbols (colours/shapes showing traits) • Borders inspired by tribal patterns Written Integration (Compulsory): For each scene (50–60 words each): • What happened? • Why is it important in the story? • What idea/theme does it represent?

		• Identify one core value (e.g., empathy, honesty, courage) Write: • Brief description of the incident • One similar situation from a story or literature • One real-life application • What will happen if this value is ignored in society? Answer in 150–180 words with clear reflection ART-INTEGRATED TASK Task: "Visual Story Analysis (ConceptBased)" Work to Do: Create a detailed visual page using Nagaland–Mizoram tribal art and folk motifs Your page MUST include: • Title of the story • 3 key scenes (drawn and labelled) • Character symbols (colours/shapes showing traits) • Borders inspired by tribal patterns Written Integration (Compulsory): For each scene (50–60 words each): • What happened? • Why is it important in the story? • What idea/theme does it represent?2 CHEMISTRY o The next events o The ending Show clear cause -and -effect		

		reasoning (120 –150 words)		
2	**CHEMISTRY**	Case study -1 The mole is an amount unit similar to familiar units like pair, dozen, gross, etc. It provides a specific measure of the number of atoms or molecules in a bulk sample of matter. A mole is defined as the amount of substance containing the same number of discrete entities (atoms, molecules, ions, etc.) as the number of atoms in a sample of pure 12C weighing exactly 12g. One Latin connotation for the word "mole" is "large mass" or "bulk," which is consistent with its use as the name for this unit. The mole provides a link between an easily measured macroscopic property, bulk mass, and an extremely important fundamental property, number of atoms, molecules and so forth. The number of entities composing a mole has been experimentally determined to be $6.02214179 \times 10^{23}$. The following questions are multiple choice questions. Choose the most appropriate answer : (i) A sample of copper sulphate pentahydrate contains 8.64 g of oxygen. How many grams of Cu is present in the sample?		Case study -2 Electron moves around the nucleus in circular orbitals in fixed energy paths. As far as electron moves in these orbits neither energy is absorbed nor liberated. But when electron move from lower energy level to higher energy level energy is absorbed while when it comes back from higher energy level to lower energy level energy is liberated in the form of photon & a spectral line is formed. Corresponding to different possible transitions different lines are formed which form the particular serieses viz. lyman, balmer, paschen, bracket, pfund, Humphery etc. Suppose e– in hydrogen atom is present in 10th excited state, then answer the following questions based on paragraph: **(i)** If electron present in 10th excited state liberate one visible quanta then next quanta liberated will correspond to following transition – (A) 10 → 2 (B) 11 → 2

(a)0.952g
(b)3.816g
(c)3.782g
(d) 8.64g

(ii) A gas mixture contains 50% helium and 50% methane by volume. What is the percent by \ weight of methane in the mixture?
(a) 19.97%
(b) 20.05%
(c) 50%
(d) 80.03%

(iii) The mass of oxygen gas which occupies 5.6 litres at STP could be
(a) gram atomic mass of oxygen
(b) one fourth of the gram atomic mass of oxygen
(c) double the gram atomic mass of oxygen
(d) half of the gram atomic mass of oxygen

(iv) What is the mass of one molecule of yellow phosphorus? (Atomic mass of phosphorus = 30)
(a)1.993×10^{-22} mg
(b)1.993×10^{-19} mg
(c) 4.983×10^{-20} mg

(C) 11 → 1
(D) 2 → 1

(ii) Total number of spectral lines which can be obtained during the transition to ground level –
(A) 45
(B) 55
(C) 66
(D) 36

(ii) Minimum value of wavelength that can be obtained during the transition – (Where R is Rydberg constant.)
(A) 121/120R
(B) 11/10R
(C) 100/99R
(D) 10/

CASE STUDY -3

The mole is a fundamental unit in chemistry that quantifies the amount of a substance. In a clinical laboratory setting, the concept of moles is pivotal for determining the concentrations of various substances in patient samples. This case study examines how laboratory

				technicians apply the mole concept to analyze glucose concentration in blood samples, a routine yet critical procedure in diagnosing and monitoring conditions 1. How is the concept of moles applied in clinical laboratory analysis? 2. Explain how moles are related to formula mass. Complete the File And solve all the numerical of chapter 1&2
3	**MATHS**	Complete trigonometric cycle and graphs of trigonometric ratios	Show that $\frac{1+Sin\,2x-Cos\,2x}{1+Sin\,2x+Cos\,2x}=\tan\,x$ Show that $\sqrt{2+\sqrt{2+2\cos 4x}}=2\,Cosx$. Prove that: $\cos^2 x+\cos^2\left(x+\frac{\pi}{3}\right)+\cos^2\left(x-\frac{\pi}{3}\right)=\frac{3}{2}$	Do all the problems of NCERT exemplar in chapter 3rd

4	**PHYSICS**	PRACTICAL FILE 1. TO MEASURE THE DIAMETER OF A SMALL SPHERICAL/CYLINDRICAL BODY USING VERNIER CALLIPERS 2. TO MEASURE DIAMETER OF A GIVEN WIRE USING SCREW GUAGE	Suggest a situation in which an object is accelerated and have constant speed. (a) If $\hat{i}$ and $\hat{j}$ are unit vectors along x & y axis respectively then what is magnitude and direction of $(\hat{i}+\hat{j})$ and $(\hat{i}-\hat{j})$? (b) Find the components of vector $\vec{a}=2\hat{i}+3\hat{j}$ along the directors of vectors $(\hat{i}+\hat{j})$ and $(\hat{i}-\hat{j})$.	Assertion (A) : Angle between $\hat{i}+\hat{j}$ and $\hat{i}$ is 45°. Reason (R) : $\hat{i}+\hat{j}$ is equally inclined to both $\hat{i}$ and $\hat{j}$ and angle between $\hat{i}$ and $\hat{j}$ is 90°. If three vectors $\vec{a}$, $\vec{b}$, $\vec{c}$ are represented by three sides of a triangle taken in the same order, then which of the following is correct? (a) $\vec{a}+\vec{b}=\vec{c}$ (b) $\vec{a}+\vec{c}=\vec{b}$ (c) $\vec{a}+\vec{b}+\vec{c}=\vec{0}$ (d) None of these.
5	**BIOLOGY**	Critical thinking- A student finds a plant that has no flowers but produces spores instead of seeds. Questions: 1.In which plant group should this organism be classified? 2.Why is it not considered a flowering plant? 3.Compare it with gymnosperms in terms of reproduction. 4.Give one example of such plants.	Situation based 2) Riya noticed that bread kept in a moist place developed a cotton-like growth after a few days. Questions: 1.Identify the organism likely growing on the bread. 2.To which kingdom does it belong? 3.Why does it grow rapidly in moist conditions? 4.How does this organism obtain its nutrition?	Logical reasoning- 3) Two plants are compared: •Plant A requires water for fertilization •Plant B does not require water for fertilization Questions: 1.Which plant groups could A and B belong to? 2.Why does Plant A depend on water? 3.What adaptation allows Plant B to reproduce without water? 4.What evolutionary advantage does this provide?
6	**PSYCHOLOGY**	Methods of Psychology Activity Activity: Conduct a small survey on the topic: "Study Habits of Students" Steps: Prepare 8–10 questions related to study habits		

		Ask 5 students to respond Record responses Present results in a table or graph Write conclusion Length: 3–4 pages Objective: To understand survey method in psychology.		
	PAINTING	Complete 15 sheets for Portfolio with index of the Painting . 5 for Object study. 5 for Nature study. 5 for Composition. Please follow the instructions- 1. Take A2 size white sheets for Portfolio. 2. Draw proper margin and draw colour carefully. 3. In Object study one fruit is compulsory. 4. In Composition sheets 6 human is figures compulsory . 5. Make front page also. 6. Submit Portfolio on time		

NOTE : Holiday homework hones the skills of creativity , giving them real life scenarios, undertake logical reasoning which helps students to express, relate & draw conclusions.