



# SUN INTERNATIONAL SCHOOL

## HOLIDAY HOMEWORK(2026-27)

CLASS: 12 (MATHS +BIOLOGY)		
S.No	SUBJECT	ASSIGNMENT
1	ENGLISH	<p>Make a project on any one of the topics related to your syllabus. Include central idea, summary, character sketch, and message of the chapter related to the topic.</p> <ol style="list-style-type: none"><li>1. <b>Language:</b> - Value/ Patriotism/ importance</li><li>2. <b>Child Labour</b> -Bangle Making in Firozabad/ Life in Slums</li><li>3. <b>Fear:</b> – Different Phobias</li><li>4. Escapism:-Time Travel: Fact or Fiction</li><li>5. Nature: - Environmental Degradation</li><li>6. Old Age and its insecurities.</li></ol> <p>Only ruled assignments /practical sheets will be used for the project.</p>
2	MATHEMATICS	<p>Make an activity file and do the following activities:</p> <ol style="list-style-type: none"><li>1. <b>Activity 1.</b> To verify that the relation <math>R</math> in the set <math>L</math> of all lines in a plane, defined by <math>R = \{(l, m) : l \perp m\}</math> is symmetric but neither reflexive nor transitive.</li><li>2. <b>Activity 2.</b> To verify that the relation <math>R</math> in the set <math>L</math> of all lines in a plane, defined by <math>R = \{(l, m) : l \parallel m\}</math> is an equivalence relation.</li><li>3. <b>Activity 3.</b> To demonstrate a function which is not one-one but is onto?</li><li>4. <b>Activity 4.</b> To demonstrate a function which is one-one but not onto.</li></ol>
3	PHYSICS	<p>Make an investigatory project ( Approximately of 10 pages) on any one topic from the list given below</p> <ol style="list-style-type: none"><li>1. Comparison of electrostatic force and gravitational force.</li><li>2. Applications of Gauss theorem.</li><li>3. Uses of capacitor in day to day life.</li><li>4. Applications of Rheostat like potential divider and variable resistance.</li><li>5. Transformer and its application.</li><li>6. Magnetic properties of diamagnetic, paramagnetic and ferromagnetic substances</li><li>7. Application of electromagnetic waves</li><li>8. Construction of compound microscope and astronomical telescope</li><li>9. Semiconductor Diodes.</li></ol>
4	BIOLOGY	<p>Make a project file on any one of the given topic:- ( Approximately of 15- 20 pages) Genetics , Biotechnology, Human health and disease</p>

5	<b>CHEMISTRY</b>	<p>Make an investigatory project ( Approximately of 10 pages) on any one topic from the list given below</p> <ol style="list-style-type: none"> <li>1. Study of the presence of oxalate ions in guava fruit at different stages of ripening.</li> <li>2. Study of quantity of casein present in different samples of milk.</li> <li>3. Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.</li> <li>4. Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)</li> <li>5. Study of digestion of starch by salivary amylase and effect of pH and temperature on it.</li> <li>6. Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.</li> <li>7. Extraction of essential oils present in Saunf (aniseed), Ajwain (carom), Illaichi (cardamom).</li> <li>8. Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chilli powder and pepper.</li> </ol>
6	<b>PHYSICAL EDUCATION</b>	<p>Make a practical file on the following topics in the Physical Education Lab Manual</p> <ol style="list-style-type: none"> <li>1. SAI Khelo India Physical Fitness Test</li> <li>2. Procedure for any two Asanas Benefits and Contradiction for lifestyle diseases.</li> <li>3. Any one IOA recognized sport/ Game of choice.</li> </ol>
7	<b>HEALTH CARE</b>	<p>Make a project of minimum 20 pages on any one of the given topic:-</p> <ol style="list-style-type: none"> <li>1. Medical Record Documentation</li> <li>2. Bio-waste management</li> <li>3. Operation Theatre</li> <li>4. Disaster Management</li> <li>5. First Aid</li> </ol>
8	<b>PAINTING</b>	<ol style="list-style-type: none"> <li>1. Make 200 quick drawings with ball pen in a drawing notebook. Each should be done in just 2 or 3 minutes without description.</li> <li>2. Make brief notes on Ch- 1 and 2 in the school register</li> </ol>
9	<b>INFORMATICS PRACTICES</b>	<ul style="list-style-type: none"> <li>• Make a file consisting of 15 programs based on Pandas and 15 SQL Query with Syntax.</li> <li>• Project work (using concepts of class XI)</li> </ul>
10	<b>HINDI</b>	<ol style="list-style-type: none"> <li>1. 'बाजार के आकर्षण' विषय पर लेख लिखते हुए परियोजना कार्य कीजिए।</li> <li>2. 'वर्तमान परिप्रेक्ष्य में हिन्दी साहित्य की स्थिति व आधुनिक साहित्यकारों की देन' विषय पर लेख तैयार कीजिए। (परियोजना कार्य एक फाइल में आकर्षक तरीके से करना है।)</li> </ol>