



NEW AL WUROOD INTERNATIONAL SCHOOL, JEDDAH  
(Affiliated to CBSE, New Delhi- NO.: 5730008)



Transforming Businesses Since 1994..

**SILVER JUBLEE YEAR (1999-2023)**  
**HOLIDAY HOMEWORK**

Dear Parents,  
Greetings from New Al Wurood!



**GRADE 11 SCIENCE – HOLIDAY ASSIGNMENT, 2023**

Subject	Assignment
PHYSICS	<p><b>Assignment 1-</b></p> <p>➤ Completion of Practical record work {8 Experiments (4 Experiments from each section) + 6 Activities(3 Activities from each section)}</p> <p style="text-align: center;"><b>SECTION- A</b></p> <ol style="list-style-type: none"><li>1) To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume..</li><li>2) To measure diameter of a given wire and thickness of a given sheet using screw gauge..</li><li>3) To Determine volume of an irregular lamina using screw gauge.</li><li>4) Using a simple pendulum, plot its L-T<sup>2</sup> graph and use it to find the effective length of second's pendulum.</li></ol> <p style="text-align: center;"><b>SECTION –B</b></p> <ol style="list-style-type: none"><li>5) To find the force constant of a helical spring by plotting a graph between load and extension.</li><li>6) To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.</li><li>7) To study the relation between frequency and length of a given wire under constant tension using sonometer.</li><li>8) To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.</li></ol> <p>*Details of the Activities have been shared.</p> <p><b>Assignment -2</b> Planning and Preparation of Science Expo</p>
CHEMISTRY	<p><b>Assignment 1-Completion of records.</b></p> <ul style="list-style-type: none"><li>• Salt Analysis-5 salts</li><li>• Volumetric Analysis-2, HCl vs Na<sub>2</sub>CO<sub>3</sub>,</li><li>• Content Based Analysis.</li></ul> <p><b>Assignment -2</b> Planning and Preparation of Science expo. Details shall be shared in the mail.</p>

<p><b>BIOLOGY</b></p>	<p><b>Assignment -1</b>  Completion of the following experiments in the record book</p> <ul style="list-style-type: none"> <li>✓ Study of the parts of a compound microscope</li> <li>✓ Study of plant specimens and identification with reasons</li> <li>✓ Study of animal specimens and identification with reasons</li> <li>✓ Test for carbohydrates, protein, starch and fat</li> <li>✓ Analysis of urine samples for the presence of urea, sugar, albumin and bile salt.</li> </ul> <p><b>Assignment -2</b>  Planning and Preparation of Science expo.  Details shall be shared in the mail.</p>
<p><b>MATHEMATICS</b></p>	<p>Grade 11 maths activities will be shared in the group  Do the activities 1,2,3,5,6,8,11,14,15,22 and submit.</p>
<p><b>COMPUTER SCIENCE</b></p>	<p><b>Assignment-1</b></p> <p>Write up on Chapter 3 important concepts-  Artificial Intelligence, Robotics, Big Data, Internet of Things, Virtual Reality and Augmented Reality, Cloud Computing and Block Chain.</p> <p><b>Assignment-2</b></p> <p>Refer w3schools.com for python and practice the basic data-types exercises and submit the assignment.</p>
<p><b>ENTREPRENEURSHIP</b></p>	<p>Any Two project as per the C B S E guidelines.</p> <p><b>TOPICS FOR THE PROJECT:</b></p> <ol style="list-style-type: none"> <li>1. Visit of the District Industries Centre and prepare a report of activities and programs undertaken by them</li> <li>2. Conduct a case study of any entrepreneurial venture in your nearby area.</li> <li>3. Field Visit: Visit any business firm near your locality; interact with the owner of the business Firm and prepare a field report on parameters like: type of business, scale of business, product/service dealing in, target customer, problems faced and measures to solve the faced challenges.</li> <li>4. Learn to Earn</li> <li>5. Know you're State Handicraft and Handlooms as a means of economic activity for the livelihood of people and intellectual property rights attached to them for the promotion of local specific skills.</li> </ol>

ASSIGNMENT No.II.

(Planning and preparation for Cluster Science expo during vacation)

SCIENCE EXPO-2023

(Classes 9-12)

OBJECTIVE:

*The objectives of organizing Science Project Competition is to emphasis on the development of science and technology as a major instrument for achieving goals of self-reliance and socio economic and socio ecological development.*

The main theme of Science Exhibition:

**“UNDERSTANDING ECOSYSTEM FOR HEALTH AND WELL-BEING”**

SUBTHEMES:

- 1) Sub-theme I: Know your ecosystem*
- 2) Sub-theme II: Fostering health, nutrition and well-being*
- 3) Sub-theme III: Social and cultural practices for ecosystem and health*
- 4) Sub-theme IV: Ecosystem based approach (EBA) for self-reliance*
- 5) Sub-theme V: Technological innovation for ecosystem and health*

*Note: There are two categories*

*(i) Junior (IX & X)*

*(ii) Senior (XI & XII)*

RULES:

*The exhibit /model include:*

- 1. Working/Attractive models to explain a concept, principle or a process.*
- 2. An indigenous design of a machine /device*
- 3. An innovative /inexpensive design or technique*
- 4. Application of basic principles of Science and Technology.*
- 5. Scheme /design of a device or machine to reduce production cost .*
- 6. Investigation based study.*

INSTRUCTIONS:

- 1. Teams are already assigned containing 3 to 4 members in each team.*
- 2. Choose you own project(idea) which connects with the main theme and subtheme as well.*

3. Prepare some essential questions which could brainstorm your idea.
4. Predict your experimental outcome.
5. Formulate hypothesis based on the predictions
6. Select dependent and independent variable
7. Procure materials required for your project
8. Plan of action to execute the idea , for example circuit diagram / model experimental set up (graphical or digital set up), even you can prepare PPT to show how you are going to execute your Idea.

*Note: IF possible you can present your working model /still model also if it is ready.*

9. After the reopening of school , after vacation, each team has to submit your ground work done which are listed in the instructions with the help of PPT( Even you can present your model) if it is ready)
10. And then you can start the execution/assembling of your model.

*Note: 1)For Classes(IX & X) ,this project will be considered as one of the SUBJECT ENRICHMENT ACTIVITY for SECOND TERM.*

*For Classes(XI & XII)This project will be considered as Investigatory project (based on the contents) {Physics,Chemistry ,Bio and Computer Science) as a part of Board practical examinations, So involvement of all the students is mandatory.*

*For queries and guidance you can contact your science teachers and regarding presentation you can contact English teachers.*

#### **Supporting website for your reference**

<https://www.theedadvocate.org/18-of-the-best-12th-grade-science-projects-and-experiments/>

<https://science.wonderhowto.com/how-to/best-investigatory-projects-science-16-fun-easy-ideas-kickstart-your-project-0147689/>

*Note: Holiday homework has been designed with the following objectives in mind:*

1. To keep the children connected with the syllabus.
2. To enhance children's creativity and engage them constructively during the holidays.
3. To bring out the innate potential in children.

*Parents are the facilitators of the child at home and are requested to assist your child to do their holiday assignment and submit it on time after vacation as it will be graded.*

Regards,

Principal.



A handwritten signature in blue ink, appearing to be a stylized name, possibly "D. J. [unclear]", written over a horizontal line.