**CONVENT OF MERCY ACADEMY ‘ALPHA’**

**PHYSICS ASSESMENT PLAN**



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| **Subject:** | **Physics** | **Duration** | **14 weeks** |  |
| **Form:** | **Sixth unit 1** | **Title** | **Mechanics/ Thermal physics** |  |
| **Semester:** | **ONE** | **Department** | **Science** |  |
| **Objectives** | * recall and show understanding of the facts, concepts, models and principles of physics, and the relationships between different topic areas in the curriculum framework; * apply knowledge, concepts and principles of physics to explain phenomena and observations, and to solve problems; * demonstrate understanding of the use of apparatus in performing experiments; * demonstrate understanding of the methods used in the study of physics; * make decisions based on the examination of evidence using knowledge and principles of physics | | | |

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| **SEMESTER ONE** | | | | | | |
| **MODULE** | **TOPICS** | **ASSESSMENT METHODS** | **ADMINISTRATION** | **LEVEL OF COGNITIVE TAXONOMY** | **PROPOSED**  **DATE** | **SCORING** |
| MECHANICS | ***Mechanics PART 1***   1. Physical quantities 2. SI Units 3. Motion along a straight line | **Class work (CW)**  Stuctured worksheet | **Individual** | Knowledge  Application  Analysis  Synthesis  Evaluation | **September 2024** | **15 %** |
|  | 1. Projectile motion 2. Newton’s Laws of motion. | **PRACTICAL/PRESENTATION (HW):** | **Group** | Knowledge  Application  Analysis  Synthesis  Evaluation | **October 2024** | **20 %** |
|  | ***Mechanics PART 2***   1. Circular motion 2. Gravitation 3. Effects of forces 4. Conservation of Energy | **MOTHLY TEST**  Module 1: Mechanics | **Individual** | Knowledge  Application  Analysis  Synthesis  Evaluation | **October 2024** | **50 %** |
| THERMAL PHYSICS | 1. Design and use of thermometer 2. Thermal properties 3. Heat Capacity 4. Heat transfer 5. The kinetic Theory Gases | **Classwork (CW):**  **Structured questions** | **Individual** | Knowledge  Application  Analysis  Synthesis  Evaluation | **November 2024** | **15 %** |

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| **Subject:** | **Physics** | **Duration** | **8 weeks** |  |
| **Form:** | **Sixth unit 1** | **Title** | **Thermal physics/ Waves and oscillasion** |  |
| **Semester:** | **Two** | **Department** | **Science** |  |
| **Objectives** | * recall and show understanding of the facts, concepts, models and principles of physics, and the relationships between different topic areas in the curriculum framework; * apply knowledge, concepts and principles of physics to explain phenomena and observations, and to solve problems; * demonstrate understanding of the use of apparatus in performing experiments; * demonstrate understanding of the methods used in the study of physics; * make decisions based on the examination of evidence using knowledge and principles of physics | | | |

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| **SEMESTER TWO** | | | | | | |
| **MODULE** | **TOPICS** | **ASSESSMENT METHODS** | **ADMINISTRATION** | **LEVEL OF COGNITIVE TAXONOMY** | **PROPOSED**  **DATE** | **SCORING** |
| THERMAL PHYSICS | 1. First Law of Thermodynamics 2. Mechanical properties of Materials |  |  |  |  |  |
| OSCILLATION  AND WAVE | 1. Harmonic Motion 2. Wave properties 1 3. Wave properties 2 4. Interference 5. Refraction 6. Physics of the ear 7. Physics of the eye |  |  |  |  |  |