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| **M O N T H** | **W E E K** | **T O P I C** | **SUB – TOPIC** | **DATE** | | **CONCEPT COVERED** | **SUBJECT**  **TEACHER’S SIGNATURE** | **HEAD OF DEPARTMENT’S REMARKS AND SIGNATURE** | **HEAD OF SCHOOL’S REMARKS AND SIGNATURE** | **REMARKS** |
| **FROM** | **TO** |
|  |  | INTRODU CTION TO PHYSICS | Concepts of Physics |  |  | Explain the concept of physics |  |  |  |  |
| Establish the relationship between physics and other subjects |
| State the importance of studying physics |
| Applications of Physics in Real Life |  |  | Explain the applications of physics in real life |
| Apply physics in daily life |
| INTRODUCTI ON TO LABORATOR Y PRACTICE | Laboratory Rules and Safety |  |  | State physics laboratory rules |  |  |  |  |
| Explain safety measures in physics laboratory |
| Use each item in a first aid kit |
| Identify warning signs |
| Use warning signs in daily life |
| Basic Principles of Scientific Investigation |  |  | Explain the concept of scientific investigation |
| Identify the steps of scientific investigation |
| Use scientific investigation methods in solving problems |
| M E A S U R E M E N  T | Concepts of Measurement |  |  | Explain the concept of measurement |  |  |  |  |
| State the importance of measurement |
| Basic Fundamental Quantities |  |  | Define a fundamental quantity |
| Mention the three basic fundamental quantities |
| State the si unit of fundamental quantities |
| Use instruments for measuring fundamental quantities |
| Derived Quantities |  |  | Explain derived quantities |
| Identify si units of derived quantities |
|  | Basic Apparatus/ Equipments and their Uses |  |  | Describe apparatus/equipments used for measurement |
|  | Density and Relative Density |  |  | Identify sources of errors in measurement |
|  | Explain the concept density of a substance and its SI unit |
|  |  | Determine the density of regular, irregular solids and insoluble substances |
|  |  | Determine the density of liquids |
|  |  | Define the relative density of a substance |
|  |  | Determine the relative density of substance |
|  |  | Interpret applications of density and relative density in real life |
| F O R C E | Concept of Force |  |  | Explain the concept of force |
|  | State the si unit of force |
| Types of Forces |  |  | Identify the types of force |
| Describe the properties of fundamental forces |
| Effects of Forces |  |  | Identify the effects of forces |
|  | Justify the effects of forces on materials |

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| **FROM** | **TO** |
|  |  | A P L F R R A L C I W O H N A I C O T M I F A E P T   1. L I 2. E O   S N  A N D | Archimedes principle |  |  | Explain the concept of upthrust |  |  |  |  |
| Verify the archimedes principle |
| Determine the relative density of a substance by applying the archimedes principle |
| law of floatation |  |  | Distinguish floating and sinking objects |
| Explain the conditions to a substance to float in fluid |
| Relate upthrust and weight of floating body |
| State the law of floatation in daily life |
| Apply the law of floatation |
| Describe the mode of action of a hydrometer |
| Construct a simple hydrometer |
| Determine the relative density of different liquids by using a hydrometer |
| 1. P M 2. R A R O T U P T   C E E   1. R R 2. T   R I  E E S  A  N O  D F | Structure of Matter |  |  | Explain the concept of matter |  |  |  |  |
| Justify the particulate nature of matter |
| Explain the kinetic theory of matter |
| Classify the three states of matter |
| Elasticity |  |  | Explain the concept of elasticity |
| Justify the relationship between tension and extension of a loaded elastic material |
| Identify the applications of elasticity in daily life |
| Adhesion and Cohesion |  |  | Explain the concept of adhesion and cohesion force |
|  | Apply adhesion and cohesion in daily life |
| Surface Tension |  |  | Explain the concept of surface tension |
|  | Identify the applications of surface tension in daily life |
| Capillarity |  |  | Explain the concept of capillarity |
|  | Identify the applications of capillarity in daily life |
| Osmosis |  |  | Explain the concept of osmosis |
| Identify the applications of osmosis in daily life |
| P R E S S U R E | Concept of Pressure |  |  | Explain the concept of pressure |  |  |  |  |
| State the si unit of pressure |
| Pressure due to Solids |  |  | Explain the dependence of pressure on surface of contact |
| Identify the applications of pressure due to solids |
| Pressure in Liquids |  |  | Describe the characteristics of pressure in liquids |
| Examine the variation of pressure with depth in liquids |
| Solve problems involving pressure in liquids |
| Explain the principle of a hydraulic press |
| Measure pressure of a liquids |
| Atmospheric Pressure |  |  | Describe the existence of atmospheric pressure |
| Identify the applications of atmospheric pressure |
| Measure the atmospheric pressure |

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| **FROM** | **TO** |
|  |  | WORK, ENERGY AND POWER | Work |  |  | Explain the concept of work |  |  |  |  |
| State the si unit of work |
| Determine the work done by the applied force |
| Energy |  |  | Explain the concept of energy |
| State the si unit of energy |
| Identify different forms of energy |
| Distinguish between potential energy and kinetic energy |
| Explain the transformation of energy |
| State the principle of conservation of energy |
| Explain the uses of mechanical energy |
| Power |  |  | Explain the concept of power |
| State the si unit of power |
| Determine the rate of doing work |
| LIGHT | Sources of Light |  |  | Explain the concept of light |
| identify the sources of light |
| Distinguish luminous from non-luminous bodies |
| Propagation and Transmission of Light |  |  | Explain the concept of rays and beam of light |
| Verify that light travels in a straight line |
| Identify transparent, translucent and opaque materials |
| Reflection of Light |  |  | Explain the concept of reflection of light |
| Distinguish between regular and irregular reflection of light |
| Apply the laws of reflection of light |
| Describe image formed by plane mirror |