

NEW ERA SENIOR SECONDARY SCHOOL NIZAMPURA, VADODARA

Yearly Syllabus planning

Class IX Physics

MONTH	NO. OF DAYS	Chapter	Content
April May	23+2	Motion	Describing motion, concept of reference point, uniform and non-uniform Motion. <u>Scalar and vector quantities</u> , distance and displacement, speed and velocity, acceleration, d-t and v-t graphs. <u>Measurements and unit systems</u>
June	19	Motion	<u>Derivation of the equations of motion</u> , uniform circular motion.
July	26	Force and laws of motion	Concept of force, balanced and unbalanced forces, Newton's Laws of motion, inertia, and mass, <u>Pseudo force</u> Concept of momentum, Newton's second law of motion and its mathematical formulation. Newton's third law of motion, and its applications. Law of conservation of momentum.
August	23	<u>Gravitation</u>	<u>Universal law of gravitation and its importance. Concept of Centripetal and Centrifugal forces ,Free fall, acceleration due to gravity, factors affecting Gravity, The Geometry of Power-Advanced, Simple Machines, Wheel and Axle – The Steering Mastery, Tension,</u>
Sept.	23	Work, Energy and power Revision for SA 1	Understanding the need of force to work, work done by a constant force and its mathematical expression, Forms of energy, kinetic energy, potential energy, and their expressions, Revision for term-1

MONTH	NO. OF DAYS	Chapter	Content
Oct.	23	Work, Energy and power	Energy transformations, Laws of conservations of energy, Energy conservation in a free falling body, and a pendulum. Power, concept and its mathematical eq. its SI unit, relation between SI unit and Commercial unit of energy.
Nov.	11	Work, Energy and power	<u>CONSERVATIVE AND NON-CONSERVATIVE FORCES</u>
Dec.	23	Sound	Production of sound, differences between oscillation and vibrations, propagation of sound, sound as mechanical longitudinal wave, characteristics of sound waves wave equation. Reflection of sound, echo, reverberation,
Jan	22	Sound Revision	Uses of multiple reflection. Limits of Audibility Applications of ultrasound, Structure of human ear.
Feb	23		Revision for term-2

❖ Underlined topics are from advance science syllabus.