

Form 4 Physics
(2024 - 2025)

Week	Topic / Content Area
1-4	<p><u>Position and Movement</u> Position, distance and displacement Speed and velocity Uniform motion Acceleration Equations of uniformly accelerated motion Vertical motion under gravity</p>
5-8	<p><u>Force and Motion</u> Newton's first law of motion Action of forces Addition and resolution of forces Newton's second law of motion Free body diagrams Newton's third law of motion Mass and weight</p>
9-10	<p><u>Work, Energy and Power</u> Mechanical work Potential energy (PE) Kinetic energy (KE) Law of conservation of energy Power</p>
11-12	<p><u>Momentum</u> Momentum Change in momentum and net force Law of conservation of momentum Elastic and inelastic collisions</p>
13-15	<p>Test and Revision</p>
	<p>First term Exam</p>
15-16	<p><u>Temperature, Heat and Internal Energy</u> Temperature and thermometers Heat and internal energy <u>Heat capacity and specific heat capacity</u></p>
17	<p><u>Transfer of Heat</u> Structure of matter Conduction Convection Radiation</p>
18-19	<p><u>Change of State</u> Three states of matter Evaporation Energy transfer during the change of state Specific latent heat of fusion Specific latent heat of vaporization</p>
20-21	<p><u>Nature of Wave</u></p>

Week	Topic / Content Area
	Nature of wave Transverse and longitudinal waves Description of wave Particle motion in transverse and longitudinal waves
22-23	<u>Properties of Wave</u> Ripple tank Stroboscope Reflection, refraction and diffraction of wave Interference of wave
24-25	<u>Wave Nature of Light</u> Evidence for wave nature of light Wave nature of light
26-27	<u>Reflection and Refraction of Light</u> Light Reflection of light Refraction of light Total internal reflection
28	<u>Lenses</u> Convex and concave lenses Construction rules for image formed by lenses Image formation by lenses
29	<u>Sound</u> Wave nature of sound Properties of sound Audible sound and ultrasound Musical note Noise
30	Revision
	Final Exam

Assignment:

1. Chapter test
2. Experiment or demonstration
3. Diary Exercise per day

Continuous Assessment:

20% Uniform test