Physics
Form 4
(2019 - 2020)

Week	Topic / Content Area
1-4	**Position and Movement** Position, distance and displacement Speed and velocity Uniform motion Acceleration Equations of uniformly accelerated motion Vertical motion under gravity
5-8	**Force and Motion** 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
9-10	**Work, Energy and Power** Mechanical work Potential energy (PE) Kinetic energy (KE) Law of conservation of energy Power
11-12	**Momentum** Momentum Change in momentum and net force Law of conservation of momentum Elastic and inelastic collisions
13-14	**Test and Revision**
	First term Exam
15-16	**Temperature, Heat and Internal Energy** Temperature and thermometers Heat and internal energy **Heat capacity and specific heat capacity**
17	**Transfer of Heat** Structure of matter Conduction Convection Radiation

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18-19	**Change of State** Three states of matter Evaporation Energy transfer during the change of state Specific latent heat of fusion Specific latent heat of vaporization
20-22	**Nature of Wave** Nature of wave Transverse and longitudinal waves Description of wave Particle motion in transverse and longitudinal waves
23-24	**Properties of Wave** Ripple tank Stroboscope Reflection, refraction and diffraction of wave Interference of wave
25-26	**Wave Nature of Light** Evidence for wave nature of light Wave nature of light
27-28	**Reflection and Refraction of Light** Light Reflection of light Refraction of light Total internal reflection
29	**Lenses** Convex and concave lenses Construction rules for image formed by lenses Image formation by lenses
30	**Sound** Wave nature of sound Properties of sound Audible sound and ultrasound Musical note Noise
31	**Revision**
	Final Exam

Assignment:

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

Continuous Assessment:
20% Uniform test