

Curriculum

Class : Grade 9

Subject : Physics

Teachers name : Ziad Mina
Hanan Hijazi

Cycle : Secondary

Textbook : National Text Book

Coordinator : Dr. Jamal Bitar

HOD : Miss Wafa Bitar

Unit	Objectives
<p>Unit 1 : Optics</p>	<ul style="list-style-type: none"> • Define and characterize a thin lens; • Distinguish between a converging lens and a diverging lens. • Distinguish between real image and virtual image
<p>Unit 2 : Electricity</p>	<ul style="list-style-type: none"> • Measure a DC voltage using a digital voltmeter, Measure an electric current using a digital ammeter, Know the laws of voltages and currents in an electric circuit, Measure a DC voltage using an oscilloscope. • Distinguish between a DC voltage and an alternating voltage • Relate the effective voltage to the maximum voltage of a sinusoidal alternating current • Know that in the AC mode, a voltmeter measures the effective voltage. • Characterize the voltage of the mains • Know the dangers of using the voltage of the mains • Know the role of the fuse and the circuit-breaker. • State Ohm's law for a resistor • Know the SI unit of resistance • Know the role of the ohmmeter • Determine the equivalent resistance of a grouping of resistors. • Know the relations giving the electric power of a DC current • Know the SI unit of the power, • State Joule's Law • Know the relation between the joule and the kilowatt hour • Know the advantages and the inconveniences of Joule's effect.

Unit	Objectives
Unit 3: Mechanics	<ul style="list-style-type: none">• Name, characterize and classify the forces acting on a body• State the principle of interaction, Know the condition of equilibrium of a solid acted by two forces• State and apply Hooke's Law• Draw and read out the curve of elongation of a spring• Define Pressure• State and apply the fundamental principle of hydrostatics• State and apply Pascal's theorem.• State and apply Archimedes principle• Define the apparent weight• Explain the flotation of a body in a liquid.