Learners Cloud

Education, Anywhere, Anytime

CCEA GCSE PHYSICS EXAMINATION BOARD COVERAGE

TIER	TOPIC	SUB HEADING	KEYWORDS	CCEA UNIT 1	CCEA UNIT 2
F/H	Thermal energy	Temperature and heat	joules, degrees		
F/H	Thermal energy	Kinetic theory	changes of state		
F/H	Thermal energy	Conduction	energy transfer		
F/H	Thermal energy	Convection	energy transfer		
F/H	Thermal energy	Radiation	infra-red		
F/H	Thermal energy	Rate of energy transfer	surface area		
F/H	Thermal energy	Energy saving	insulator, U-value, double glazing		
F/H	Thermal energy	Solar energy	solar heating, solar cell, solar panel		
F/H	Thermal energy	Specific heat	specific heat capacity		
F/H	Using and generating electricity	Generating electricity	fossil fuels, biofuels, renewable, non-renewable, turbine, power station, greenhouse gases, climate change, deforestation, habitats, nuclear waste	y	
F/H	Using and generating electricity	Nuclear power	uranium, turbine, radioactive, fission, power station	y	
F/H	Using and generating electricity	National grid	step-up transformer, step-down transformer		y
F/H	Using and generating electricity	Transformers	step-up transformer, step-down transformer, induced		y
F/H	Using and generating electricity	Cost of electricity	appliance, power, kWh, energy saving		
F/H	Using and generating electricity	What is electricity	ac, dc, mains		y
F/H	Using and generating electricity	Cables and plugs	3-pin plug, 3 core cable, fuse, earthing		y
F/H	Using and generating electricity	Electrical power	watt, fuse, appliance	y	y
F/H	Using and generating electricity	Efficiency	Sankey diagram	y	
F/H	Static electricity	Static electricity	attract, repel, charge, electrostatic		y
F/H	Electrical circuits	Current, voltage & resistance	ammeter, voltmeter, potential difference, charge, coulomb		y
F/H	Electrical circuits	Series and parallel circuits	components		y
F/H	Electrical circuits	Ohms law	resistance, voltage, current		y
F/H	Electrical circuits	Resistance	current, voltage, resistor, filament lamp, diode, LED, thermistor, LDR		y
F/H	Electricity and magnetism	Motors and generators	inducing, electricity and magnetism		y
F/H	Waves	Waves	electromagnetic, longitudinal, transverse, sound, light, amplitude, wavelength, frequency		y
F/H	Waves	Wave equations	frequency, wavelength, amplitude, speed		y
F/H	Waves	Electromagnetic spectrum	electromagnetic, transverse, light, microwave, radio wave, X-ray, gamma wave, radiation, UV, IR		y
F/H	Waves	Lasers	light		
F/H	Waves	Ultrasound	echo, reflection, longitudinal, depth		y
F/H	Earth	Seismic waves	crust, mantle, plate, earthquake, P wave, S wave		y

TIER	TOPIC	SUB HEADING	KEYWORDS	CCEA UNIT 1	CCEA UNIT 2
F/H	Optics	Reflection & refraction	angle of incidence, angle of reflection, ray diagram, refractive index, total internal reflection, optical fibre, endoscope, spectrum		y
F/H	Optics	Diffraction	interference		
F/H	Optics	Lenses	real, virtual, concave, convex, magnification, ray diagram, power, focal length		y
F/H	Optics	The eye and sight	focusing, retina, lens, long sight, short sight		
F/H	Motion and forces	Forces	friction, weight, Newton	y	
F/H	Motion and forces	Friction	force	y	
F/H	Motion and forces	Stopping distance	thinking time, braking time, safety		
F/H	Motion and forces	Motion graphs	distance-time graphs, speed, acceleration, velocity - time graph	y	
F/H	Motion and forces	Terminal velocity	air resistance, acceleration, balanced forces		
F/H	Motion and forces	Mass and weight	gravity	y	
F/H	Motion and forces	Momentum	velocity, collision, explosion	y	
H	Motion and forces	Change of momentum	car safety, speed	y	
F/H	Motion and forces	Collisions	elastic, inelastic		
F/H	Motion and forces	Circular motion	centripetal force	y	
F/H	Work, forces, energy and power	Energy transfer	potential, kinetic, chemical, GPE, KE, Sankey diagram	y	
F/H	Work, forces, energy and power	Work	force	y	
F/H	Work, forces, energy and power	Power	watts	y	
F/H	Work, forces, energy and power	GPE	gravitational potential energy	y	
F/H	Work, forces, energy and power	Kinetic energy	KE	y	
H	Work, forces, energy and power	Energy transfer calculations	conservation of energy		
F/H	Solar system	Solar system	galaxy, planet, star, comet		y
F/H	Solar system	Life of a Star	black hole, red giant, white dwarf, fusion		y
F/H	Solar system	Origin of the Universe	big bang, CMBR, red-shift, Doppler effect		y
F/H	Atoms and radioactivity	Atomic structure	electron, proton, neutron, mass number	y	
F/H	Atoms and radioactivity	Nuclear radiation	ion, alpha, beta, gamma, ionising, penetrating power, background	y	
F/H	Atoms and radioactivity	Half-life	decay	y	
F/H	Atoms and radioactivity	Uses of radiation	danger, tracers, ionising,dating, C-14	y	
F/H	Atoms and radioactivity	Fission and fusion	uranium, chain reaction	y	