

## OCR GATEWAY (B) GCSE PHYSICS EXAMINATION BOARD COVERAGE

## Education, Anywhere, Anytime

TIER	TOPIC	SUB HEADING	KEYWORDS	OCR B Module Pi	OCR B Module P2	OCKB	OCR B Module P4	OCR B Module P5	OCR B Module P6
F/H	Thermal energy	Temperature and heat	joules, degrees	y y	MUDULE PZ	MUVULE P3	MUDULE P9	MUDULE PS	MUVULE PO
F/H	Thermal energy	Kinetic theory	changes of state	у					
F/H	Thermal energy	Conduction	energy transfer	у					
F/H	Thermal energy	Convection	energy transfer	у					
F/H	Thermal energy	Radiation	infra-red	у					
F/H	Thermal energy	Rate of energy transfer	surface area	у					
F/H	Thermal energy	Energy saving	insulator, U-value, double glazing	у					
F/H	Thermal energy	Solar energy	solar heating, solar cell, solar panel		у				
F/H	Thermal energy	Specific heat	specific heat capacity	У					
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		у				
F/H	Using and generating electricity	Nuclear power	uranium, turbine, radioactive, fission, power station		у		у		
F/H	Using and generating electricity	National grid	step-up transformer, step-down transformer		у				у
F/H	Using and generating electricity	Transformers	step-up transformer, step-down transformer, induced		у				у
F/H	Using and generating electricity	Cost of electricity	appliance, power, kWh, energy saving		У	У			
F/H	Using and generating electricity	What is electricity	ac, dc, mains		у				у
F/H	Using and generating electricity	Cables and plugs	3-pin plug, 3 core cable, fuse, earthing				У		
F/H	Using and generating electricity	Electrical power	watt, fuse, appliance		у		У		
F/H	Using and generating electricity	Efficiency	Sankey diagram	У	У				
F/H	Static electricity	Static electricity	attract, repel, charge, electrostatic				у		
F/H	Electrical circuits	Current, voltage & resistance	ammeter, voltmeter, potential difference, charge, coulomb				У		
F/H	Electrical circuits	Series and parallel circuits	components						у
F/H	Electrical circuits	Ohms law	resistance, voltage, current				у		
F/H	Electrical circuits	Resistance	current, voltage, resistor, filament lamp, diode, LED, thermistor, LDR				у		у
F/H	Electricity and magnetism	Motors and generators	inducing, electricity and magnetism		у				у
F/H	Waves	Waves	electromagnetic, longitudinal, transverse, sound, light, amplitude, wavelength, frequency	У			у	У	
F/H	Waves	Wave equations	frequency, wavelength, amplitude, speed	У					
F/H	Waves	Electromagnetic spectrum	electromagnetic, transverse, light, microwave, radio wave, X- ray, gamma wave, radiation, UV, IR	У	У		у	У	
F/H	Waves	Lasers	light	у					
F/H	Waves	Ultrasound	echo, reflection, longitudinal, depth				у		
F/H	Earth	Seismic waves	crust, mantle, plate, earthquake, P wave, S wave	у					

TIER	TOPIC	SUB HEADING	KEYWORDS	OCR B	OCR B	OCRB	OCR B	OCR B	OCRB
F/H	Optics	Reflection & refraction	angle of incidence, angle of reflection, ray diagram, refractive index, total internal reflection, optical fibre, endoscope, spectrum	MODULE PI y	MODULE P2	MODULE P3	MODULE P4	MODULE P5	MODULE P6
F/H	Optics	Diffraction	interference	у				У	
F/H	Optics	Lenses	real, virtual, concave, convex, magnification, ray diagram, power, focal length					у	
F/H	Optics	The eye and sight	focusing, retina, lens, long sight, short sight						
F/H	Motion and forces	Forces	friction, weight, Newton			у			
F/H	Motion and forces	Friction	force			у			
F/H	Motion and forces	Stopping distance	thinking time, braking time, safety			у			
F/H	Motion and forces	Motion graphs	distance-time graphs, speed, acceleration, velocity - time graph			у			
F/H	Motion and forces	Terminal velocity	air resistance, acceleration, balanced forces			у			
F/H	Motion and forces	Mass and weight	gravity			У			
F/H	Motion and forces	Momentum	velocity, collision, explosion			у			
н	Motion and forces	Change of momentum	car safety, speed			У			
F/H	Motion and forces	Collisions	elastic, inelastic						
F/H	Motion and forces	Circular motion	centripetal force		У				
F/H	Work, forces, energy and power	Energy transfer	potential, kinetic, chemical, GPE, KE, Sankey diagram			У			
F/H	Work, forces, energy and power	Work	force			У			
F/H	Work, forces, energy and power	Power	watts			у			
F/H	Work, forces, energy and power	GPE	gravitational potential energy			У			
F/H	Work, forces, energy and power	Kinetic energy	KE			у			
Н	Work, forces, energy and power	Energy transfer calculations	conservation of energy			У			
F/H	Solar system	Solar system	galaxy, planet, star, comet		У				
F/H	Solar system	Life of a Star	black hole, red giant, white dwarf, fusion		У				
F/H	Solar system	Origin of the Universe	big bang, CMBR, red-shift, Doppler effect		у				
F/H	Atoms and radioactivity	Atomic structure	electron, proton, neutron, mass number				у		
F/H	Atoms and radioactivity	Nuclear radiation	ion, alpha, beta, gamma, ionising, penetrating power, background		у		У		
F/H	Atoms and radioactivity	Half-life	decay				у		
F/H	Atoms and radioactivity	Uses of radiation	danger, tracers, ionising, dating, C- 14		у		у		
F/H	Atoms and radioactivity	Fission and fusion	uranium, chain reaction				У		