

## OCR 21ST CENTURY (A) GCSE PHYSICS EXAMINATION BOARD COVERAGE

Education, Anywhere, Anytime

TiCD	TODIC	OTO TICY DIAG	VON IORNO	OCR A (2IC)						
TIER	TOPIC	SUB HEADING	KEYWORDS	MODULE PI			MODULE P4			
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		у					
F/H	Thermal energy	Rate of energy transfer	surface area							
F/H	Thermal energy	Energy saving	insulator, U-value, double glazing			У				
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		У	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				
F/H	Using and generating electricity	Transformers	step-up transformer, step-down transformer, induced					у		
F/H	Using and generating electricity	Cost of electricity	appliance, power, kWh, energy saving			у				
F/H	Using and generating electricity	What is electricity	ac, dc, mains					у		
F/H	Using and generating electricity	Cables and plugs	3-pin plug, 3 core cable, fuse, earthing							
F/H	Using and generating electricity	Electrical power	watt, fuse, appliance			у		у		
F/H	Using and generating electricity	Efficiency	Sankey diagram			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		
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						
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					
F/H	Waves	Lasers	light							
F/H	Waves	Ultrasound	echo, reflection, longitudinal, depth							
F/H	Earth	Seismic waves	crust, mantle, plate, earthquake, P wave, S wave	у						
F/H	Optics	Reflection & refraction	angle of incidence, angle of reflection, ray diagram, refractive index, total internal reflection, optical fibre, endoscope, spectrum		у					У
F/H	Optics	Diffraction	interference							У

				UCD Y (UIC)	DCD A (OIC)	חרם א (סור)	חרם א (מור)	DCD A (OIC)	DCD A /OIC)	DCD A (OIC)
TIER	TOPIC	SUB HEADING	KEYWORDS	OCR A (2IC) Module Pi	MODULE P2	OCR A (2IC) Module P3	OCR A (2IC) Module P4	OCR A (2IC) Module P5	OCR A (2IC) Module P6	OCR A (2IC) Module P7
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							
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							
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							
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							
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						У
F/H	Solar system	Origin of the Universe	big bang, CMBR, red-shift, Doppler effect	У						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	
F/H	Atoms and radioactivity	Half-life	decay						У	
F/H	Atoms and radioactivity	Uses of radiation	danger, tracers, ionising,dating, C- 14						У	
F/H	Atoms and radioactivity	Fission and fusion	uranium, chain reaction						У	