

CCEA AS 2

Spec Ref	Topic	TAP episode	comments
2.1	transverse and longitudinal waves, $v = f\lambda$	309, 311	
	polarisation	313	
	regions of the electromagnetic spectrum	314	
	amplitude, period, frequency, wavelength and phase	310	
2.2	Snell's law, $n = \sin i / \sin r$	317	
	total internal reflection $C = 1/n$	318	
2.3	ray diagrams for converging and diverging lenses		No ref
	$1/u + 1/v = 1/f$		No ref
	$m = v/u$, lens power		No ref
	correction of myopia and hypermetropia		No ref
2.4	superposition of two sinusoidal waves	320	
	standing waves , nodes and anti-nodes	324	
	coherence , interference, path & phase difference	321, 322	Coherence in 322
	Young's slits $\lambda = ay/d$	321	
2.5	diffraction	323	
2.6	frequency of a pure note using a CRO	311	
	speed of sound in air using a resonance tube		No ref
	$dB = 10\lg_{10} I/I_0$		No ref
	frequency and intensity response for the ear		No ref
2.7	endoscope technique and applications		No ref
	ultrasonic A-scans and B-scans		No ref
	CT scans		No ref
	MRI scans		No ref
2.8	$E = hf$	501	
	photoelectric effect and work function	502	
2.9	energy levels in atoms	501	
	$hf = E_1 - E_2$	501	
	laser action	504	
2.10	wave model & the photon model	506	
	electron diffraction the de Broglie formula	506	