

Spec Ref	Topic	TAP episode	comments
2.4.3	superposition, interference, coherence, path and phase difference	320, 321	
	two source interference using sound, light and microwaves;	321	
	intensity = power/cross-sectional area, intensity \propto amplitude²	315	Not amplitude dependency
	Young double-slit, $\lambda = ax/D$	321	
	diffraction grating $d\sin\theta = n\lambda$	322	
	advantages of using multiple slits		
2.4.4	formation of stationary waves	324	
	nodes and antinodes) experiments using microwaves, stretched strings and air columns	324-1/2	
	closed and open pipes	324-10	
	fundamental & harmonics;	324	
	determine the speed of sound in a pipe closed at one end.	324-6	
2.5.1	photon model, $E = hf$	501	
	the electronvolt, $eV = \frac{1}{2}mv^2$	502	Very briefly
	Planck constant & experiment to estimate using $eV = hc/\lambda$		LED experiment NOT described
2.5.2	photoelectric effect;	502	
	evidence for waves and particles		Not specifically discussed
	work function and threshold frequency, $hf = \phi + KE_{\max}$	502-3	
2.5.3	electron diffraction $\lambda = h/mv$	506	
	electron diffraction & the size of nuclei.	506-3	
2.5.4	spectral lines and energy levels	501	
	emission and absorption line spectra;	501	
	$hf = E_1 - E_2$, $hc/\lambda = E_1 - E_2$	501	