KS4 Science: Light and the Electromagnetic Spectrum CP5: Light and the Electromagnetic Spectrum (Paper 1)

Lesson	Objectives Tracker Sheet	Date covered	l know this well	I need to do more work on this
CP5a Ray diagrams	SP5.1P Explain, with the aid of ray diagrams, reflection, refraction and total internal reflection (TIR), including the law of reflection and critical angle.			
CP5a Investigating refraction – Core Practical	SP5.9 Investigate refraction in rectangular glass blocks in terms of the interaction of electromagnetic waves with matter.			
CP5b The electromagnetic spectrum	P5.10 Recall the main groupings of the continuous electromagnetic spectrum including (in order) radio waves, microwaves, infrared, visible (including the colours of the visible spectrum), ultraviolet, X-rays and gamma rays.			
	electromagnetic spectrum as continuous from radio waves to gamma rays and that the radiations within it can be grouped in order of decreasing wavelength and increasing frequency.			
	P5.13 H Recall that different substances may absorb, transmit, refract, or reflect electromagnetic waves in ways that vary with wavelength.			
CP5c Using the long wavelengths	P5.13 H Recall that different substances may absorb, transmit, refract, or reflect electromagnetic waves in ways that vary with wavelength.			
	P5.14 H Explain the effects of differences in the velocities of electromagnetic waves in different substances			
	 P5.22 Describe some uses of electromagnetic radiation: (a) radio waves: including broadcasting, communications and satellite transmissions (b) microwaves: including cooking, communications and satellite transmissions (c) infrared: including cooking, thermal imaging, short range 			
	communications, optical fibres, television remote controls and security systems (d) visible light: including vision, photography and illumination.			

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and nuclei can:		and nuclei can:		
(a) generate radiations over a wide		(a) generate radiations over a wide		
frequency range		frequency range		
(b) be caused by absorption of a		(b) be caused by absorption of a		
range of radiations.		range of radiations.		