

Table 1: The Electromagnetic Spectrum							
Speed of Light ( $v$ ) $\approx$ 300,000 km/s							
1 Å (Ångström) = 0.000000001 m = 0.1 nm							
$f$ (Hz)	$\lambda$ (meters)						
$10^{21}$	$3 \times 10^{-13}$	↑ X-rays ↓	↑ Gamma Rays ↓	↑ Ultraviolet radiation ↓			
$10^{20}$	$3 \times 10^{-12}$						
$10^{19}$	$3 \times 10^{-11}$						
$10^{18}$	$3 \times 10^{-10}$						
$10^{17}$	$3 \times 10^{-9}$						
$10^{16}$	$3 \times 10^{-8}$						
$10^{15}$	$3 \times 10^{-7}$			Visible light	Violet	4000Å	$4 \times 10^{-7}$ m
					Indigo	4300Å	
					Blue	4800Å	
					Green	5300Å	
					Yellow	5800Å	
					Orange	6100Å	
					Red	7000Å	$7 \times 10^{-7}$ m
$10^{14}$	$3 \times 10^{-6}$		↑ Infrared radiation ↓				
$10^{13}$	$3 \times 10^{-5}$						
$10^{12}$	$3 \times 10^{-4}$						
$10^{11}$	$3 \times 10^{-3}$	↑ Radio waves ↓			↑	Micro-waves	
$10^{10}$	$3 \times 10^{-2}$						
$10^9$	$3 \times 10^{-1}$						
$10^8$	$3 \times 10^0$						
$10^7$	$3 \times 10^1$						
$10^6$	$3 \times 10^2$						
$10^5$	$3 \times 10^3$						
$10^4$	$3 \times 10^4$						
$10^3$	$3 \times 10^5$						
$10^2$	$3 \times 10^6$						
$10^1$	$3 \times 10^7$						
$10^0$	$3 \times 10^8$						
			↑ TV ↓	↑ AM/FM radio ↓	Communication bands: Amateur, police, airplanes, etc.		