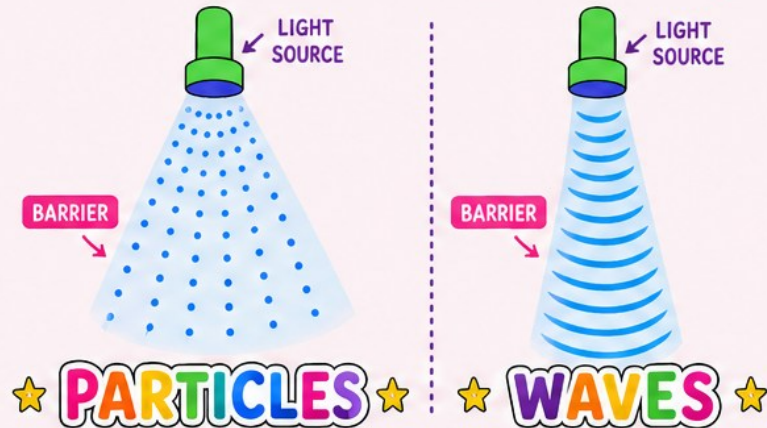
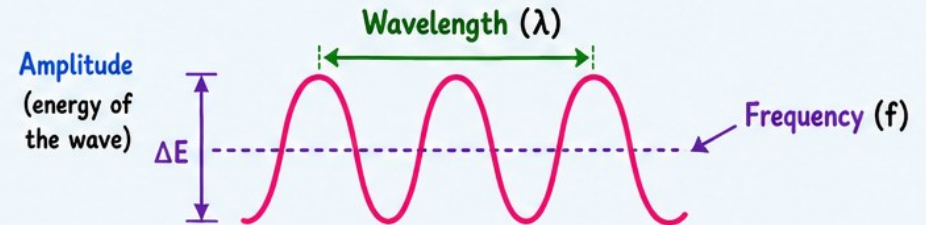


EM Radiation

EM radiation can behave as both a **wave** and a **particle**.



Wave Model



1 Frequency (f)

- Number of waves passing a fixed point in 1 second.

Unit: Hz or s^{-1}

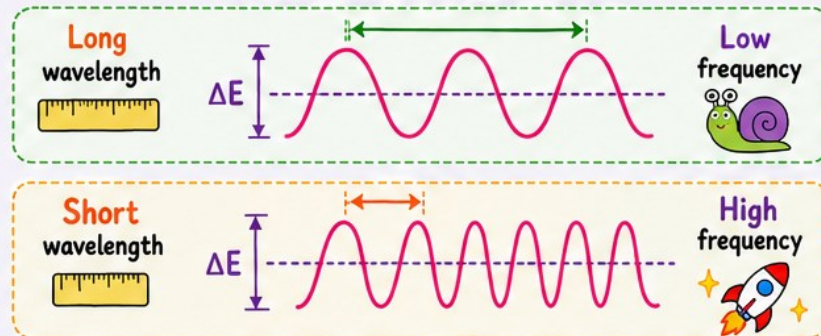
2 Wavelength (λ)

- Distance between two crests or troughs.

Unit: m or 10^{-9} m

Frequency & Wavelength

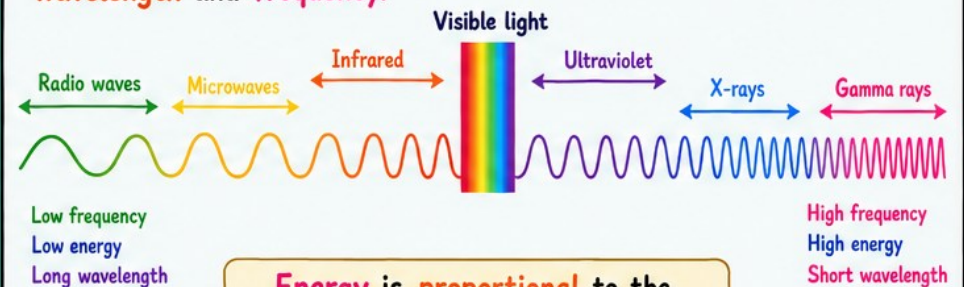
Inversely Proportional



Frequency and wavelength are inversely proportional to each other.

Electromagnetic Spectrum

Described in terms of **waves** and characterised by **wavelength** and **frequency**.



Energy is proportional to the frequency of radiation.

low frequency (high wavelength) ↔ high frequency (low wavelength)