

Task - Introduction to Optics – What is Light?

Use your notes and the internet to answer the following questions about light

1. a) Which colour in the visible spectrum has the longest wavelength? How many nanometers is the wavelength?

- b) **Which** colour in the visible spectrum has the shortest wavelength? How many nanometers is the wavelength?

- c) List the colours of the visible spectrum in their order and the acronym to correctly remember them.

Complete the chart provided.

Type of Electromagnetic Wave	Properties (list wavelength range, frequency range, speed in a vacuum)	Examples/ Uses
Radio waves	Wavelength Range: Frequency Range: Speed:	
Infrared	Wavelength Range: Frequency Range: Speed:	
Visible Light	Wavelength Range: Frequency Range: Speed:	
Ultraviolet	Wavelength Range: Frequency Range: Speed:	
X-Rays	Wavelength Range: Frequency Range: Speed:	
Gamma Rays	Wavelength Range: Frequency Range: Speed:	