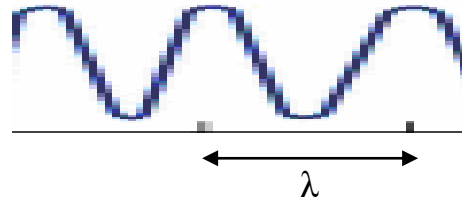


Using Standard Form for Wavelengths of Light

Light comes in the form of waves.



The wavelength is the distance between two peaks. It is often denoted by the symbol: λ

1) 1 nanometre is defined as 1×10^{-9} m. This is:

- a) 0.000000001 m b) 0.00000001 m c) 0.9 m

2) Visible blue light (the sky) has a wavelength of 4.75×10^{-7} m.

This is:

- a) 0.000000475 m b) 0.0000000475 m c) 4750000 m

3) The grass appears green because all the colours except green are absorbed into the leaves. The green colour is reflected. The wavelength is 0.00000051 m. Write this in standard form.

4) Visible yellow light is said to have a wavelength of 570 nm. This means 0.00000057 m. Red light has a wavelength of 650 nm which gives a sunset its colour. Write this out as a normal number.

5) A x-ray has $\lambda = 1 \times 10^{-12}$ m. Write this out as a normal number.

6) On the other hand. Radio waves are about 1×10^3 m. Write this out as a normal number.

A diagram showing different wavelengths.

