

Wavelength, Frequency, Speed & Energy Worksheet

$$c = \lambda \nu$$

$$\nu = c / \lambda$$

$$\lambda = c / \nu$$

$$E = h\nu$$

$$E = hc / \lambda$$

c = speed of light (3.0×10^8 m/s)
 λ = wavelength
 ν = frequency
 E = energy
 h = Planck's constant (6.6262×10^{-34} J•s)

1. Calculate the λ given the ν of radiation is $5.10 \times 10^{14} \text{ s}^{-1}$
2. Calculate the **frequency** of red light with $\lambda = 6.50 \times 10^{-7} \text{ m}$
3. The more I shave my face, the shorter my beard is an example of a **inverse**

wave and how does it make us hear things? (might need to look for
about ears to answer this one)

4. What is a sound
more information a