What are waves?

Longitudinal and Transverse Waves

Draw a diagram of each and describe, giving examples of each.

Longitudinal

Transverse

Label the wavelength, amplitude.

Frequency - ........................................

Period - ..............................................

Wavelength - ......................................

Amplitude - ......................................

Velocity - ...........................................
Refraction

What is refraction?

Draw a line to show what will happen as the ray of light travels through the glass.

Explain why the light changes direction.

Calculating Speed

\[
\text{Speed (m/s)} = \frac{\text{distance (m)}}{\text{time (s)}}
\]

\[
\text{Wave speed (m/s)} = \text{frequency (Hz)} \times \text{wavelength (m)}
\]

1) Calculate the speed of a sound wave which travels 4000m in 2.6 seconds.

2) The sound wave has a frequency of 6000Hz, calculate its wavelength.

Explain how to measure waves:

On water - .................................................................................................................................

In solids - .................................................................................................................................