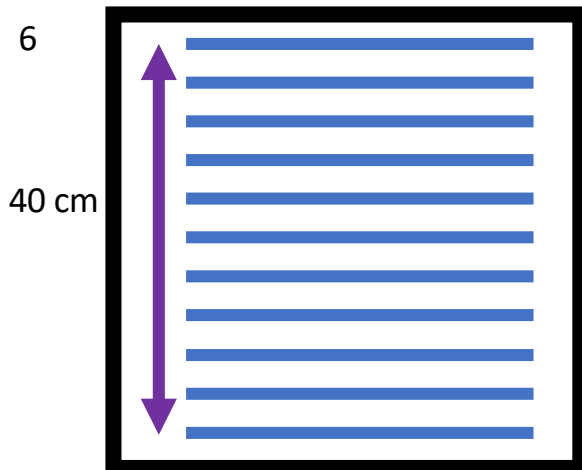


- 1 Define the **amplitude** of a wave
- 2 Define the **wavelength** of a wave
- 3 Define the '**crest**' or '**peak**' of a wave
- 4 Define the '**trough**' of a wave
- 5 Draw and label a wave diagram with the key words from the box below

amplitude
 wavelength
 peak
 trough
 undisturbed position



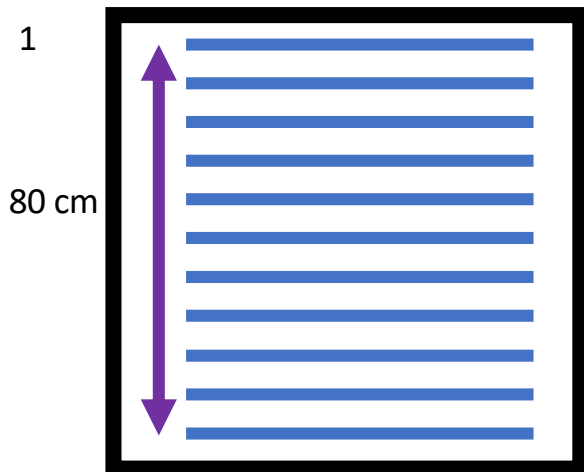
A signal generator is connected to a paddle in a ripple tank.

The frequency is set to 100 Hz.

A lamp is used to cast shadows of the ripple onto a screen below the ripple tank,

The diagram to the left shows part of the shadow pattern.

- a) How many wavelengths are there?
- b) i) What is the wavelength in centimetres? ii) Convert the wavelength into metres?
- c) State the frequency of the wave.
- d) Recall the equation linking wave speed, wavelength, and frequency.
- e) Calculate the speed of the ripples.



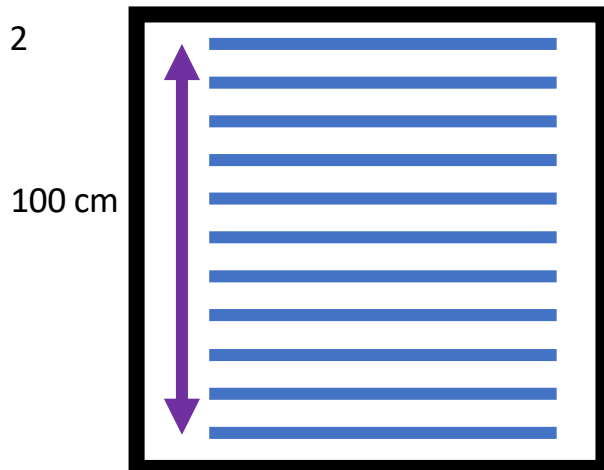
A signal generator is connected to a paddle in a ripple tank.

The frequency is set to 1900 Hz.

A lamp is used to cast shadows of the ripple onto a screen below the ripple tank,

The diagram to the left shows part of the shadow pattern.

a) Calculate the speed of the ripples.



A signal generator is connected to a paddle in a ripple tank.

The frequency is set to 250 Hz.

A lamp is used to cast shadows of the ripple onto a screen below the ripple tank,

The diagram to the left shows part of the shadow pattern.

a) Calculate the speed of the ripples.