

Ripple tank - Method

1. Rearrange the following steps into the correct order and then **copy** them into your book.

Measuring Wavelength

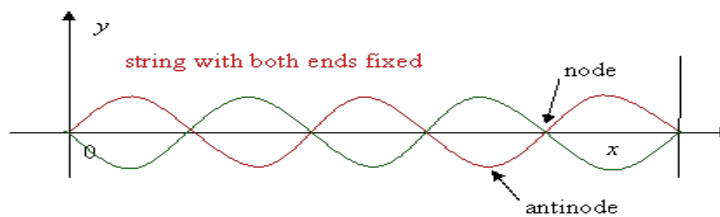
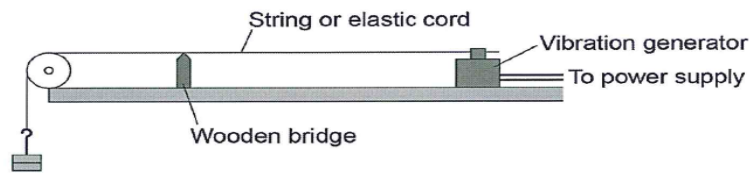
Adjust the speed of the motor to produce low frequency waves
Fill the ripple tank with around 5 cm of water
Use this equation to calculate wavelength; $\text{Wavelength} = \text{Length of waves} / \text{Number of waves}$
Switch on the light and power supply
Count and record the number of waves seen
Using a metre ruler at right angles measure the length of as many waves as possible

Measuring Frequency

Divide by the number of waves by 10 to get the frequency
Use the equation; Speed = wavelength x frequency to calculate the speed of the waves
Count the number of waves that pass a certain point in 10s

Waves on a string

1. Draw the diagram of the equipment into your books



Measuring Wavelength

3. Measure the distance between 3 nodes with a metre ruler – this gives you the wavelength

1. Set up the equipment like the diagram above

2. Turn on the signal generator and adjust the frequency until you can clearly see the waves on the cord

Measuring Frequency

This is easily done by reading the display on the signal generator.