

Physics Workshop

Speed of Sound

1. Follow the instructions on the Technical Notes and measure the speed of sound in air.
2. Devise a method for measuring the speed of sound in a solid
3. Set the Sound Switches 40cm apart and obtain the time to travel this distance. Repeat for 60, 80...140cm. Now draw a distance/time graph – put time on the x axis. The gradient is the speed of sound.

Apparatus supplied

TSA & Plugtop

Measuring tape or metre stick

Sound switches

Clapper Board

Graph paper

Ruler

Toffee hammer (shared)