

# Waves

## 1. Sound

### CONCEPT 1

### TEST YOURSELF

#### WHAT IS SOUND?

##### KNOW

- Q1 What causes the sound when a bell is rung?
- Q2 How does the sound from a trumpet in an orchestra reach a person in the audience?

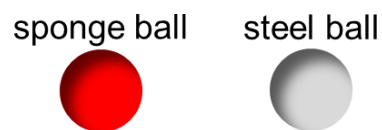
##### APPLY

- Q3 Describe the movement of air particles in a longitudinal sound wave.
- Q4 How can a longitudinal sound wave transfer energy from the source of sound to a receiver?
- Q5 Match the sounds to the correct loudness in dB

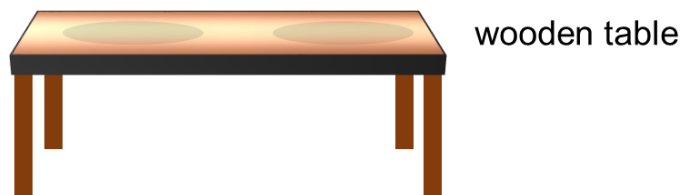
Sound	Loudness (dB)
someone whispering	80
washing machine spin	140
jet engine	60
motorbike	140
someone talking	30

##### EXTEND

- Q6 The diagram shows a sponge ball and a steel ball above a wooden desk. They are dropped one at a time and they both make a sound.



Explain why the steel ball make a louder sound than the sponge ball.



- Q7 Explain why a sound will not be as loud as it travels further from the source.