

Checklist

What you should know

After studying this subtopic, you should be able to:

- Understand the difference between transverse waves and longitudinal waves.
- Describe the motion of a wave using the terms wavelength, frequency and time period.
- Determine the speed of a wave using the equations:

$$v = f\lambda \text{ and } v = \frac{\lambda}{T}$$

- Describe the properties of sound waves.
- Understand the differences between mechanical waves and electromagnetic waves.
- Describe the properties of electromagnetic waves.

Practical skills

Once you have completed this subtopic, go to [Practical 5: Measuring the speed of sound \(<https://app.kognity.com/study/app/physics/sid-423-cid-762593/book/measuring-the-speed-of-sound-id-46509/>\)](#) in which you will use simple harmonic motion to measure the speed of sound.

