

3 Light and sound – Part 2 —Answers

Answers

Work through these after trying the questions yourself.

3.1 The angle of incidence equals the angle of reflection.

3.2 The normal (a line at 90° to the surface).

3.3 Towards the normal.

3.4 Total internal reflection.

3.5 radio waves $\rightarrow$ infrared $\rightarrow$ visible light $\rightarrow$ X-rays.

3.6 Sound needs a medium (particles) to travel through, and a vacuum has none.

3.7 (a) The angle of reflection = 35° (equal to the incidence). (b) Each ray is 35° from the normal, on opposite sides, so the angle between them is 70° .