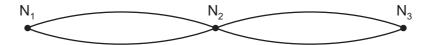
25 An electromagnetic wave has a wavelength of 1.0×10^{-7} m.

To which region of the electromagnetic spectrum does this wave belong?

- A infra-red
- **B** ultraviolet
- C visible
- **D** X-ray
- 26 The diagram shows a stationary wave on a string. The stationary wave has three nodes N_1 , N_2 and N_3 .



Which statement is correct?

- **A** All points on the string vibrate in phase.
- **B** All points on the string vibrate with the same amplitude.
- $oldsymbol{\mathsf{C}}$ Points equidistant from N_2 vibrate with the same frequency and in phase.
- **D** Points equidistant from N_2 vibrate with the same frequency and the same amplitude.
- 27 In which situation does diffraction occur?
 - A A wave bounces back from a surface.
 - **B** A wave passes from one medium into another.
 - **C** A wave passes through an aperture.
 - **D** Waves from two identical sources are superposed.