

**23** Some sources of electromagnetic waves in free space are listed.

- 1 a radio wave transmitter
- 2 a source of X-rays
- 3 a 30 mm wavelength radar transmitter
- 4 a light-emitting diode that emits red light

Which list gives the sources in order of increasing wavelength, from left to right, of the waves emitted by the sources?

**A** 1 → 3 → 4 → 2

**B** 2 → 4 → 1 → 3

**C** 2 → 4 → 3 → 1

**D** 3 → 1 → 4 → 2