

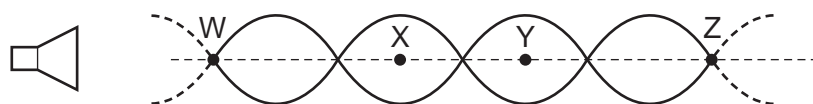
22 Diffraction is the name given to the

- A** addition of two coherent waves to produce a stationary wave pattern.
- B** bending of waves round an obstacle.
- C** change of direction when waves cross the boundary between one medium and another.
- D** splitting of white light into colours.

23 Which wave properties change when light passes from air into glass?

- A** colour and speed
- B** frequency and wavelength
- C** speed and wavelength
- D** wavelength and colour

24 The diagram represents the pattern of stationary waves formed by the superposition of sound waves from a loudspeaker and their reflection from a metal sheet (not shown).



W, X, Y and Z are four points on the line through the centre of these waves.

Which statement about these stationary waves is correct?

- A** An antinode is formed at the surface of the metal sheet.
- B** A node is a quarter of a wavelength from an adjacent antinode.
- C** The oscillations at X are in phase with those at Y.
- D** The stationary waves oscillate at right angles to the line WZ.

Space for working