

**23** Which statement about waves is correct?

- A** Both longitudinal and transverse waves can travel through a vacuum.
- B** Both longitudinal and transverse waves transfer matter.
- C** Longitudinal progressive waves consist of alternate nodes and antinodes.
- D** The particles of a transverse wave vibrate perpendicular to the direction of energy propagation.

**24** A stationary wave is formed by two waves travelling in opposite directions. The wave is stationary because the two waves have the same frequency and amplitude.