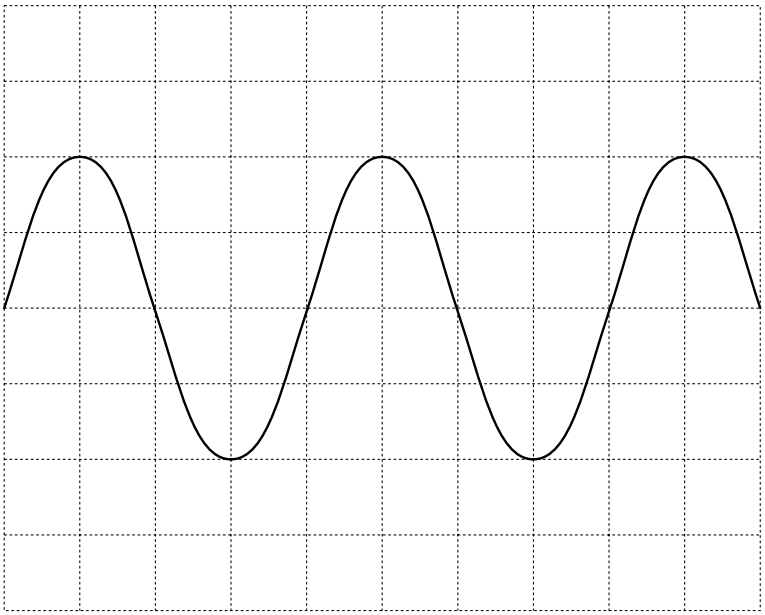
25 Which of the following summarises the change in wave characteristics on going from infra-red to ultraviolet in the electromagnetic spectrum?

	frequency	speed (in a vacuum)
A	decreases	decreases
B	decreases	remains constant
C	increases	remains constant
D	increases	increases

26 The diagram shows a cathode-ray oscilloscope trace of a sound wave. The time-base is calibrated at 2.0 ms cm^{-1}.



What is the frequency of the sound wave?

A 62.5 Hz **B** 125 Hz **C** 250 Hz **D** 500 Hz

27 Which statement correctly relates the intensity of a sound wave to the vibrations of the molecules?

A intensity α amplitude

B intensity α $(\text{amplitude})^2$

C intensity α displacement

D intensity α $(\text{displacement})^2$