

- 15** An object placed on a horizontal platform is vibrating vertically in simple harmonic motion with a frequency of 3.0 Hz.

The amplitude of vibration of the platform is gradually increased from zero. At one particular amplitude, the object is seen to lose contact with the platform.

What is the amplitude of the oscillation when this occurs?

- A** 2.8 cm **B** 6.2 cm **C** 7.8 cm **D** 12.4 cm