

- 15** One end of a spring is fixed to a support. A block of mass 2.0 kg is attached to the other end of the spring, which causes the spring to extend by 5.0 cm.

The block is then pulled down a distance of 2.5 cm and released to perform a simple harmonic motion of period 0.45 s.

What is the amplitude and angular frequency of the motion?

	amplitude / cm	angular frequency / rad s <sup>-1</sup>
<b>A</b>	7.5	0.45
<b>B</b>	7.5	14
<b>C</b>	2.5	0.45
<b>D</b>	2.5	14