

- 1 A student hypothesizes that the period of an oscillating mass-spring system T is related to its mass m and spring constant k . In an experiment, the student obtains the relationship

$$T = Cm^{1/2}k^{-1/2}$$

where C is a constant.

Which of the following gives the unit of C ?

- A s
- B $\text{s N}^{1/2} \text{ m}^{-1/2}$
- C kg^{-1}
- D C does not have a unit.