

7 A pendulum of mass 0.40 kg swings from a frictionless pivot.

The pendulum is released from rest at a height of 0.60 m above its lowest point.

After n complete oscillations, the maximum height h of the pendulum, in metres, is given by

$$h = 0.60e^{-0.10n}.$$

What is the work done against air resistance by the pendulum in the first two oscillations?

A 0.11 J

B 0.43 J

C 0.49 J

D 2.4 J

