

- 11 An object of mass m at a height h above the ground has a total energy E equal to mgh . It falls from rest, taking time t to reach the ground. Assume that air resistance is negligible.

What are the potential energy (P.E.) and kinetic energy (K.E.) of the object at time $\frac{t}{2}$?

	P.E.	K.E.
A	$\frac{E}{2}$	$\frac{E}{2}$
B	$\frac{E}{3}$	$\frac{2E}{3}$
C	$\frac{E}{4}$	$\frac{3E}{4}$
D	$\frac{3E}{4}$	$\frac{E}{4}$

