

- 17 When an object of mass  $m$  is raised through a vertical height  $\Delta h$ , the gain of its gravitational potential energy is  $\Delta E_P$ .

$\Delta E_P$  and  $\Delta h$  are related by the equation

$$\Delta E_P = mg\Delta h,$$

where  $g$  is the acceleration of free fall.

The definition of which physical quantity is needed to derive this equation?

- A acceleration
- B momentum
- C power
- D work done