

**17** A stone of mass  $0.30\text{ kg}$  is thrown vertically downwards with a speed of  $20\text{ ms}^{-1}$  from a height of  $12\text{ m}$  above the ground. It falls vertically until it hits the ground. Air resistance is negligible.

What is the kinetic energy of the stone just before it hits the ground?

**A**  $25\text{ J}$

**B**  $35\text{ J}$

**C**  $60\text{ J}$

**D**  $95\text{ J}$