A brick is lifted to a given height and then dropped to the ground. Next, a second brick, which weighs the same as much as the first, is lifted twice as high as the first and then dropped to the ground.

When the second brick strikes the ground its kinetic energy is

A) half of the first.
B) as much as the first.
C) twice as much as the first.
D) four times as much as the first.
Explanation: The ratio of kinetic energies equals the corresponding ratio of the potential energies; i.e., \( \frac{K_2}{K_1} = \frac{m g h_2}{m g h_1} = \frac{h_2}{h_1} = \frac{2 h_1}{h_1} = 2 \).

Answer C.

08.04-02'More'Kinetic'Energy  2004-3-24