

Potential and Kinetic
Energy Quiz

$$E_p = Fd$$

$$E_p = mgh$$

$$E_k = \frac{1}{2}mv^2$$

1. An uncompressed spring is 25.0 cm in length. What is the potential energy of this spring when an average force of 75.0 N compresses it to a length of 15.0 cm?

2. a 15.0 kg rock is held 15.0 m above the ground

a) What is the potential energy of the rock with respect to the ground

b) If the rock is dropped, what will be the velocity when it strikes the ground

c) What is the kinetic energy of the rock as it strikes the ground?