

Elastic Potential Energy and the Work done by a spring

Related video: 15 – Forms of Energy in Mechanics: Elastic Potential Energy

In a horizontal toy-cannon, a small plastic ball of mass m is accelerated by a compressed spring with a spring constant k . The spring is initially compressed by a distance x . Find the kinetic energy when the ball leaves the cannon and the work done by the spring.

Note: This problem has no numbers. Find the solution as a function of m , k and x .

