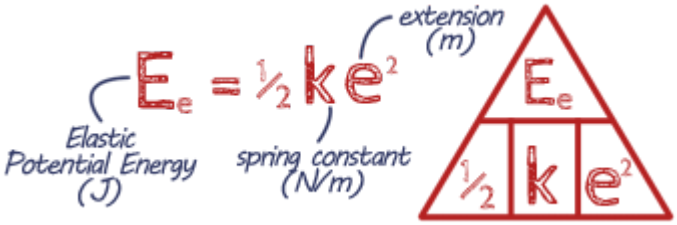
GCSE Revision Buddy

Elastic Potential Energy Worksheet



1. How much work must be done on a spring with a spring constant of 80 N/m to stretch the spring 20 cm?

2. A spring has an extension of 20 cm. Calculate the elastic potential energy stored in the spring (k = 100 N/m).

3. A spring is stretched with a spring constant of 3 N/m until it is extended by 50 cm. What is the elastic potential energy stored by the spring?

4. How much elastic potential energy does a spring store when it is compressed by 0.2 m if it has a spring constant of 5 N/m?

5. What is the elastic potential energy stored in a spring whose spring constant is 160 N/m when it is compressed 8.0 cm?

6. How much would a spring scale with a spring constant of 120 N/m stretch if it had 3.75J of work done on it?

7. What is the spring constant of a spring if the extension of the spring is 0.15 m when 0.72J of potential energy is stored in it?