

GLOSSARY

E

elastic potential energy the potential energy in a stretched or compressed elastic object (178)

G

gravitational potential energy the potential energy associated with an object due to its position relative to Earth or some other gravitational source (177)

K

kinetic energy the energy of an object due to its motion (172)

M

mechanical energy the sum of kinetic energy and all forms of potential energy (182)

P

potential energy energy associated with an object due to its position (174)

power the rate at which energy is transferred (187)

S

spring constant a parameter that expresses how resistant a spring is to being compressed or stretched (178)

W

work the product of the magnitudes of the component of a force along the direction of displacement and the displacement (168)

work–kinetic energy theorem the theorem stating that the net work done on an object is equal to the change in the kinetic energy of the object (174)