Physics 231 -   27-Sep-99

- Work-Energy Theorem
- Potential Energy
  - Due to gravity
  - Pendulum
  - In a spring
- Conservation of Energy
- quiz

Work-Energy Theorem

Potential Energy

- Due to gravity

- In a spring

- In a pendulum

Energy Conservation

- $E_{Tot} = E_{Potential} + E_{Kinetic}$ is conserved

Q1 -   Answer = c
Q2 - Problem A - Last name A-K

A lead ball with mass 2 kg is dropped from a height of 3 m. What is its kinetic energy just before it hits the ground? (g = 9.8 m/s^2)

A. 6 J

B. 19.6 J

C. 29.4 J

D. 59 J

E. 118 J

Q1 - Answer = c
Q2 - Problem B - Last Name L-Z

A ball of mass 0.25 kg is thrown straight up with initial velocity 2.0 m/s. What maximum change in potential energy does it achieve?

A. 0.5 J

B. 1.0 J

C. 4.9 J

D. 9.8 J

E. 19.6 J