Work done

1) The …… spent when doing a …… is called the ……..
2) Therefore …… is measured in ……
3) If Nimal spends 100J to push an object, then the …….. by Nimal will be ……..
4) Work done = …….. x ……
5) Work done is measured in ……
6) Force is measured in ……
7) Distance moved is measured in ……

- Amal pushed an object a distance of 20m using a force of 30N. Find the …… by Amal.

  Work done = …….. x ……..

  = …….. x ……

  = ……..

- Kamal raised an object having a mass of 5kg a height of 1.5m. Find the …… by Kamal.

  Weight = …….. x ……

  = …….. x ……..

  = ……

  Therefore the force used to raise the object = ……

  Work done = …….. x ……..

  = …….. x ……..

  = ……..

Energy

1) …… is measured in ……
2) There are many types of ……

(i) ……. Energy

(ii) …… energy

(iii) …… energy

(iv) …… energy

(v) …….. energy

Kinetic Energy

1) …… energy is found in object which are ……..

   E_K = ……

   E_K = ……. energy (measured in …….)

   m = …….. (measured in ……..)

   V = …….. (measured in ……..)

- An object having a mass of 250g was moving at a velocity of 40ms^{-1}. Find its …….. energy.

  E_K = ……..

  = …… x …… x …….

  = ……. x …… x ……

  = ……..

- The mass of object A is double the mass of object B. The object B was moving at front at a velocity of 2ms^{-1}. Object A moved behind the object B at a velocity of 5ms^{-1} and knock on object B. After collision, the velocity of object A became 3ms^{-1}. Find the velocity of object B

Sum of …….. before …… = Sum of …… after ……..

……. of A + ……. of B before ……. = …… of A + ……. of B after ……

…… + …….. = …… + ……..

…… + …….. = …… + ……..

…… + …….. = …… + ……

……. + …… = …… + ……..

…… - …… = ……

…… = …….

……. = …….

Potential energy

1) …… energy is found in objects that are at a ……..

   E_p= ……..

   E_p= …… energy (measured in ……..)

   m= …….. (measured in ……..)

g = ... acceleration (.....)

h = ... (measured in .....)

- An object having a mass of 500g was at a height of 4m. Find the energy found in that object. ($g=10ms^{-2}$)

E_p = ...

= ..... x ..... x .....

= .....

- An object was thrown up at a velocity of $40ms^{-1}$. Find the maximum height it will reach. ($g=10ms^{-1}$)

Sum of ..... at the ..... level = Sum of ..... at the maximum .....

..... + ... at the ..... level = ... + ... at the maximum .....

(.....) + (.....) = (.....) + (.....)

(.....) + (.....) = (.....) + (.....)

..... + ... = ... + ...

..... = ...

..... = ...

..... = ...

- An object fell from a certain height. Its velocity became $40ms^{-1}$ when it was falling exactly half its height. Find the height it fell from. ($g=10ms^{-2}$)

Sum of ..... at ..... = Sum of ..... at .....

..... + ... at ..... = ... + ... at .....

(.....) + (.....) = (.....) + (.....)

(.....) + (.....) = (.....) + (.....)

..... + ... = ... + ...

..... – ..... = ...

..... = ...

..... = ...

..... = ...