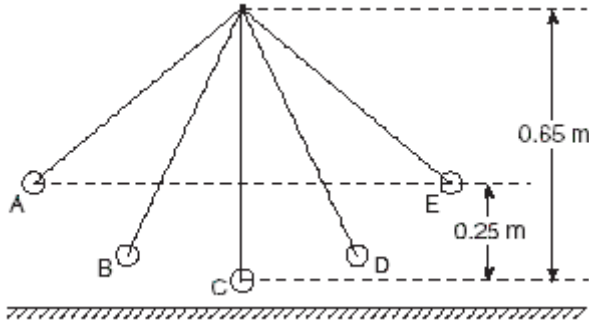


VII. Energy Flash Cards

1. A 0.65-meter-long pendulum consists of a 1.0-kilogram mass at the end of a string. The pendulum is released from rest at position A, 0.25 meter above its lowest point.



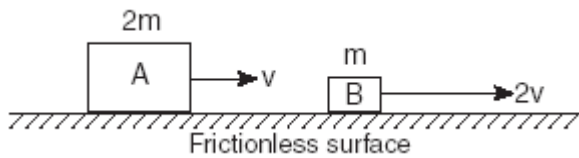
PE is maximum at _____ KE is maximum at _____
 The total energy as the pendulum swings to the right side _____

PE is maximum at and

KE is maximum at

The total energy as the pendulum swings to the right side

2. The diagram below shows block A, having mass $2m$ and speed v , and block B having mass m and speed $2v$.



Compared to the kinetic energy of block A, the kinetic energy of block B is

- (1) the same
- (2) twice as great
- (3) one-half as great
- (4) four times as great

3a) When work is done on or by a system, there is a change in the total _____ of the system.

a)

3b) Power is the time-rate at which _____ is done or _____ is expended.

b)

4. A girl rides an escalator that moves her upward at **constant speed**. As the girl rises, how do her gravitational potential energy and kinetic energy change?

- (1) Gravitational PE decreases and KE decreases.
- (2) Gravitational PE decreases and KE remains the same.
- (3) Gravitational PE increases and KE decreases.
- (4) Gravitational PE increases and KE remains the same

Energy Flash Cards

<p>5a) Potential energy is the energy an object possesses by virtue of its _____ or _____.</p> <p>5b) Kinetic energy is the energy an object possesses by virtue of its _____.</p>	<p>a) <input type="text"/> or <input type="text"/></p> <p>b) <input type="text"/></p>
<p>6. Which action would require no work to be done on an object?</p> <p>(1) lifting the object from the floor to the ceiling (2) pushing the object along a horizontal floor against a frictional force (3) decreasing the speed of the object until it comes to rest (4) holding the object stationary above the ground</p>	<input type="text"/>