##### [00:00:06.730] - Speaker 1

Imagine you have a ball which you throw upwards. As the ball travels upwards, we say that it has kinetic energy. Kinetic energy is a form of energy possessed by a body due to its motion. Therefore, anything that moves has kinetic energy, such as a car traveling on the road and a plane flying in the sky.

##### [00:00:32.330] - Speaker 1

Even you possess kinetic energy when you walk or run. In fact, the faster a body moves, the greater it's kinetic energy. Therefore, when you run, you have more kinetic energy than when you walk.

##### [00:00:48.510] - Speaker 1

When a body stops, there is no more kinetic energy. When you come to a stop or when the car stops moving, kinetic energy becomes zero. If we now raise the ball to a certain height and release it, what happens? It starts falling downwards, right? It starts from a position of rest and then gains speed when you let it go.

##### [00:01:10.660] - Speaker 1

In other words, it starts with zero kinetic energy and then gains some kinetic energy. Where does this kinetic energy come from? This energy, which is stored in the ball, is called potential energy. Potential energy is a form of energy stored in a body due to its position. Let's have a closer look here.

##### [00:01:33.310] - Speaker 1

The position is the ball's height from the ground. When you release it, the potential energy converts to kinetic energy. In fact, the higher the ball, the larger its potential energy. That is why if we raise the ball to a greater distance from the ground and release it, it will hit the ground harder. Let's look at another example.

##### [00:01:56.450] - Speaker 1

Look at the slingshot. It has stored energy with which it can throw the bird up to a certain distance. Based on its position in the slingshot, we can say the bird has potential energy. As soon as it's released from the slingshot, it gains kinetic energy. And because of kinetic energy, it is able to apply force on the little houses to break them down.

##### [00:02:21.070] - Speaker 1

Time for an exercise. Who has the greatest potential energy?

##### [00:02:29.340] - Speaker 1

Bubbles has the most potential energy because she is at the top. We know that potential energy increases with the increase in the distance of a body from the ground. Let's summarize potential energy is the energy of a body due to its position. Kinetic energy, on the other hand, is the energy of a body due to its motion. Potential energy mostly depends on the distance of a body from the ground.

##### [00:02:57.700] - Speaker 1

Kinetic energy depends on its speed.