

Lesson 3

Conservation of Energy

Energy can change from one form to another, but cannot be lost.

Consider:

- Potential energy is gradually converted to kinetic energy.
- Ideally 100% of the potential energy will be converted to kinetic. In reality, friction is present and some energy will be converted to other forms like heat.
- When friction is ignored, we say that we have a conservative system.

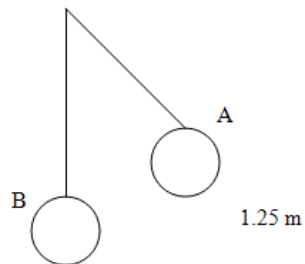
Example:



If the ball shown starts from rest at A, what is its speed at B?

Example:

What speed does the pendulum bob have at the lowest point in its swing?



LAB: CONSERVATION OF ENERGY