

## 9-4: Energy Conversion & Conservation

### I. Conversions between energy forms

1) Flashlight -

2) Match -

3) Marble  
Down Ruler

### II. Conservation of Energy

A. "

### B. Energy & Friction

- Moving objects experience  
so some of the KE will be  
turned into

## C. Kinetic & Potential Energy

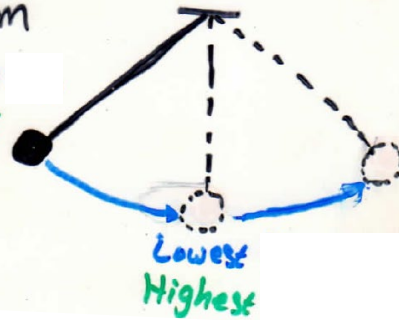
- A common change of energy

- A falling Ball



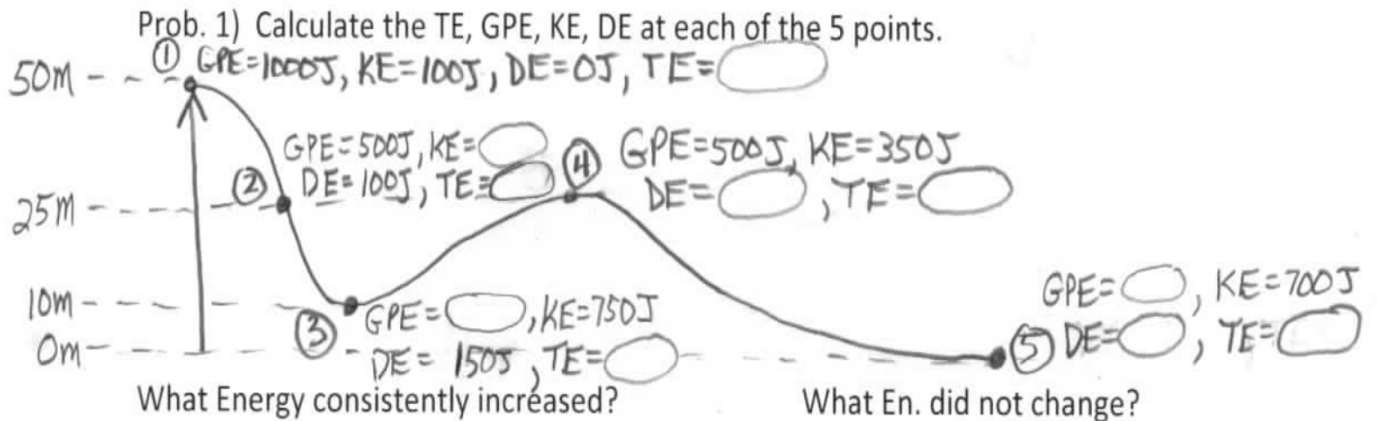
- Pendulum

Highest  
Lowest

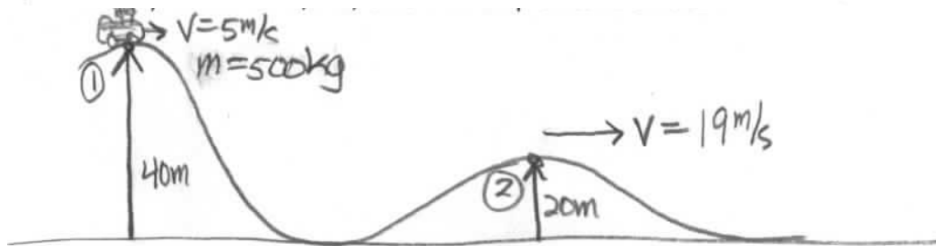


Eq. 9-8 Total Energy

Total Energy =



Prob. 2) Calc. GPE, KE, TE, and DE at points 1 and 2



How much DE was there between points 1 and 2?

What was this cause of this Dissipated Energy?