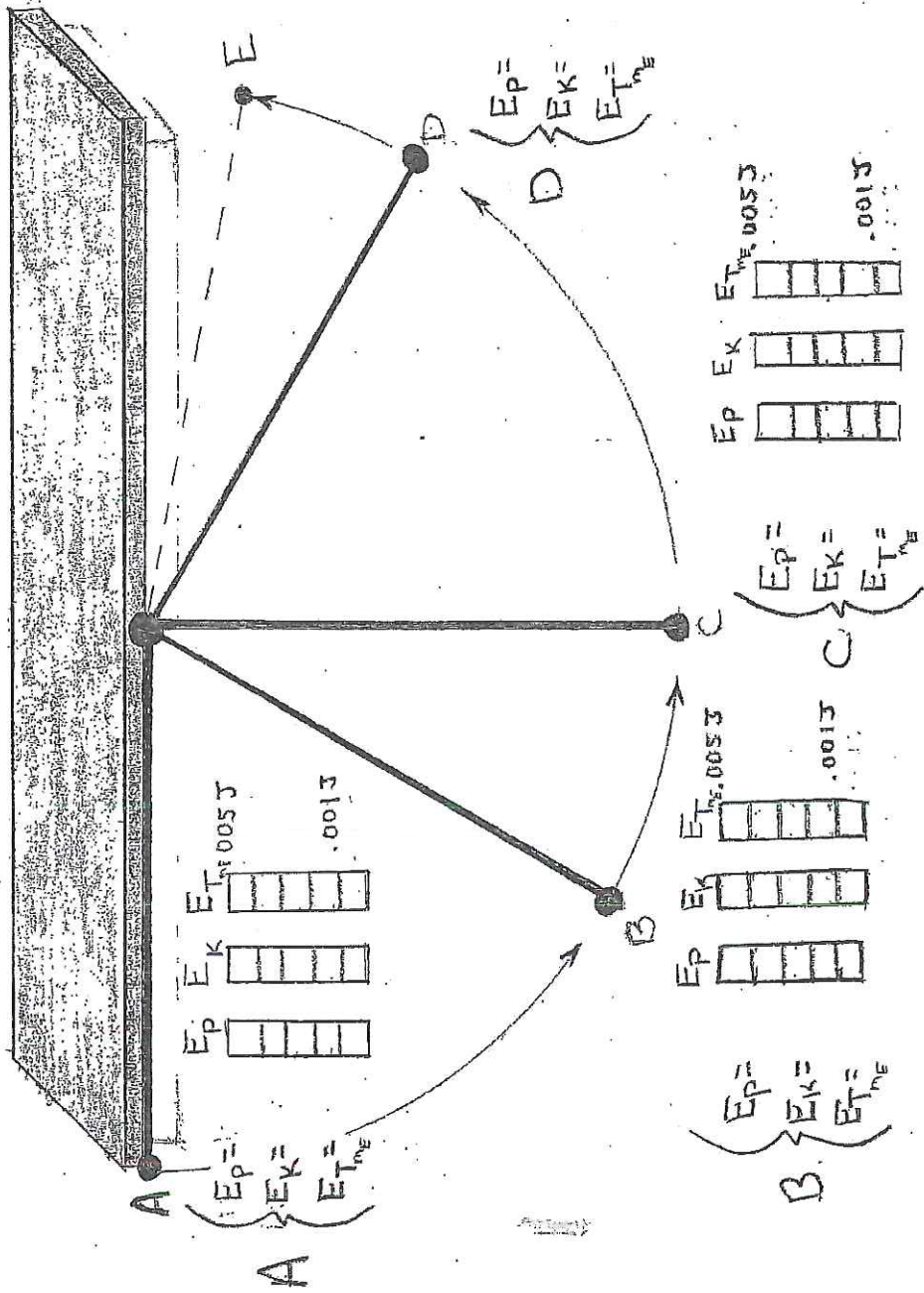
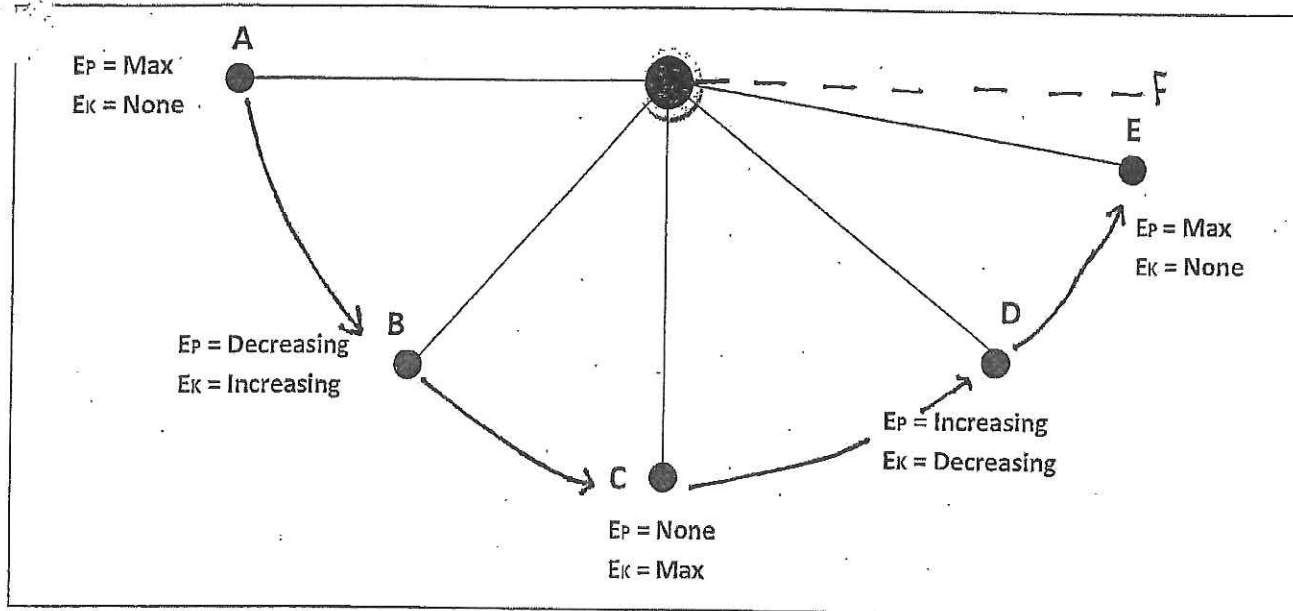


Pendulum Mass = .007 kg



Kinetic and Potential Energy



1. What is energy?

The ability to cause change or do work

2. How does E_p differ from E_k ?

stored moving

3. What does the Law of Conservation of Energy state?

E cannot be created nor destroyed

4. How is the Law of Conservation of Energy demonstrated by the movement of the Pendulum?

Total Energy remains constant as $E_p + E_k$ change

5. Describe the point at which the E_k of the pendulum is the highest.

C (Lowest Pt.)

6. Describe the relationship between the E_k and the E_p of a swinging pendulum at their highest and lowest points.

They are the "opposites" (highest $E_k = \text{Lowest } E_p$)

7. At what point in the pendulum's swing is its E_p the highest?

A (Highest Pt.)

8. Why is it impossible for the pendulum to reach point F?

Some E is lost as thermal

9. Will the pendulum eventually stop? Explain your answer in 3 sentences, remember energy is never created nor destroyed

Yes, But Why?