1. What are three variables could affect the pendulum’s swing?
   A. Change the amplitude and displacement.
   B. Change the length.
   C. Change the mass of the bob.
2. At what position(s) (use letters) is there the greatest P.E. in the swing? A and C
3. At what position(s) (use letters) is there the greatest K.E. in the swing? B
4. At what position(s) is the speed and acceleration the greatest? B
5. Pendulum terms to learn.
   A. Bob – The mass that swings.
   B. Length – The distance from pivot point to the center of the bob.
   C. Displacement – The horizontal distance pulled back from rest.
   D. Amplitude – The vertical distance pulled back from rest.
   E. Cycle or Vibration – One full swing, over and back.
   F. Frequency (f) – The vibrations (swings) made over a certain time.
      It is measured in Hertz (Hz).
      \[ f = \text{cycles/time} \]
   G. Period of the pendulum (T) – The time it takes for one cycle to be completed.
      It is measured in seconds.
      \[ T = \text{time/frequency (f)} \quad \text{or} \quad T = 1/\text{frequency (f)} \]
   H. Simple Harmonic Motion (S.H.M.) – A uniform motion that repeats its path.