

PLAN of THE DAY 10-16-06 (Monday – Day 5 - B Day)

(Mr. Menin, PSII, Room 279)

MOTION => CHANGE IN MOTION => CAUSE OF CHANGE IN MOTION

Continuing Objectives: Understanding of **average velocity** as [Total Distance] / [Total Time] or = [Total Distance] / [Total Time] = Σd 's / Σt 's = $\Delta d / \Delta t$.

Understanding of (*average*) acceleration as => **a** = $\Delta v / \Delta t = (v_f - v_i) / (t_f - t_i)$.

Understanding of displacement, velocity & acceleration vs. time graphs (*nine total*) for conditions of constant displacement, velocity & acceleration. Understanding for constant acceleration **$V_{AVG} = [V_f + V_i] / 2$** . Rearrangement of these three basic equations of motion so as to derive others.

1. Ask how note takers are doing: (*Worth 5 point Coupon on each Qtr Quiz & Test – not UNQ*).
A => Kristen Olsson
B => Mike Child
D => Halsey Berryman
E => Clark Jacobsen (*revised from Sarah Collins*).

2. Rearrangement of the following derived basic equations of motion:

$$V_f = V_i + a (t)$$

$$\Delta d = V_i (\Delta t) + \frac{1}{2} (a) (t^2)$$

so as to derive an expression independent of time as follows:

$$[V_f]^2 = [V_i]^2 + 2 a (\Delta d)$$

3. Answer questions on POD 10 / 10H
4. Continue Lab – “**Prove That You Can Accelerate**” or do mini “*Prove You Have The Slowest Car and Fastest Car*” lab.