Physics 112

Tuesday, February 25/20

1. Return:

FA - Calculate **R** 7 Missing

2. Questions?

IP - U1S2 -> Graphical Analysis

- 3. FA Velocity vs Time Graph Checked in Class - See Next Page for Final Answers
- 4. SA: U1 S1&2 -> Topics (After Final Answers for V-T FA)
 -> Date: <u>Thursday, Feb. 28</u>

*Task Sheets

- 5. U1-S3: Mathematical Analysis
- 6. Word Problem Checklist
- 7. Uniform Motion Kinematic Equation
- 8. Uniformly Accelerated Motion -Kinematic Equation #1

Kinematic Equation #2

Kinematic Equation #3

Kinematic Equation #4

FA. Velocity-Time Graph

a) 0.89m/52, 5

- 0.5 m/52

h) 54m

6.0m. N

d 3.0 m/5

e) 0.33 m15, N

f, 0.5 2 m/5, N

Topics -> SA U1: S1&2

- 1. kinematics
- 2. two types of physical quantities:
 - (i) scalar quantity has magnitude and a unit
 - be able to provide the definitions, symbols, and units of time, distance and speed
 - (ii) vector quantity has magnitude, direction and a unit
 - vector notation
 - conventional directions
 - be able to provide the definitions, symbols, and units of position, displacement, velocity and acceleration
- 3. arrows are used to represent vector quantities graphically
- 4. resultant
- 5. two graphical methods used to add vector quantities:
 - (i) tip-to-tail method
 - (ii) parallelogram method
- 6. determine the range of possible resultant values
- 7. add vectors analytically (follow the rubric)

8. three types of motion: no motion uniform motion uniformly accelerated motion

- 9. use direction of velocity and acceleration to describe an object's motion (ie/complete chart for vehicle)
- 10. interpret position-time graphs
- 11. interpret velocity-time graphs
- 12. obtain information by reading data from a velocity-time graph and performing calculations

Format: MC (multiple choice)

Interpret General P-T and V-T Graphs

Calculate **R** (rubric)

Chart (motion of a vehicle)

Velocity-Time Graph

Physics 122

Tuesday, February 25/20

- 1. Check: IP U1S2 Static Torque (Type I)
- 2. FA: Static Torque (Type I) Submit Today
- 3. Torque Type II Forces Acting at Angles
- 4. IP U1S2 Static Torque (Type II)
- 5. SA 2D Forces and Static Torque Problems (End of the Week)

Science 122

Tuesday, February 25/20

- 1. Check:
 - IP Half-Life, Activity and Decay Constant (2)
- 2. More About Light
- 3. Quantum Theory
- 4. Electron-volt
- 5. Quantization of Energy
- 6. Photons
- 7. The Photoelectric Effect
- 8. Solar Cells
- 9. Wave-Particle Duality of Light
- 10. IP Energy of Photons, Work Function, Etc.

Science 10

Tuesday, February 25/20

- 1. Return:
 - FA Atoms and Ions
- 2. Ionic Compounds Containing Polyatomic Ions Continue
- 3. Nomenclature Worksheet #3 -Ionic Compounds Containing Polyatomic Ions
- 4. Transition Elements
- 5. Multivalent Metals
- 6. Ionic Compounds Containing Multivalent Metals
- 7. Worksheet #4 Ionic Compounds Containing Transition Metals
- 8. Recap Types of Ions
- 9. Identify Types of Ions
- 10. Worksheet #5 Ionic Compounds Summary
- 11. Lots of Ionic Naming Practice Problems
- 12. FA Mixed Ionic Compounds