Physics 112

Monday, October 1/18

http://mvhs.nbed.nb.ca/
http://mvhs-sherrard.weebly.com/

1. Check:

Worksheets: Velocity-Time Graphs (4)

- 2. FA Velocity-Time Graph Calculations Tomorrow
- 3. SA -> U1: S1&2 Topics
 Date (...) Oct. 5/18.
- 4. Concept U1 S3: Mathematical Analysis
- 5. Word Problem Checklist
- 6. Uniform Motion Kinematic Equation
- 7. Uniformly Accelerated Motion-Kinematic Equation #1
- 8. UAM Kinematic Equation #2
- 9. UAM Kinematic Equation #3
- 10. UAM Kinematic Equation #4
- 11. Worksheet Motion Problems

Topics -> SA U1: S1&2

- 1. kinematics
- 2. two types of physical quantities:
 - (i) scalar quantity has magnitude only
 - has units
 - be able to name and give examples of four scalar quantities
 - (ii) vector quantity has magnitude and direction
 - has units
 - vector notation
 - conventional directions
 - be able to name and give examples of four vector quantities
- 3. arrows are used to represent vector quantities graphically
- 4. resultant
- 5. two graphical methods used to add vector quantities:
 - (i) head-to-tail method
 - (ii) parallelogram method
- 6. determine the range of possible resultant values
- 7. adding vectors analytically (follow the rubric)

8. three types of motion: no motion

uniform motion uniformly accelerated motion

- 9. use directions 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)

Chart (scalars vs. vectors, names/examples)

Calculate **R** (rubric)

Chart (motion of a vehicle)

Velocity-Time Graph

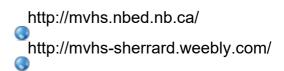
Physics 122

Monday, October 1/18

- http://mvhs.nbed.nb.ca/
 http://mvhs-sherrard.weebly.com/
- 1. Submit LC and Justifications for FA Force Problems (Mixed)
- 2. Static Torque Problem: Type I (All Forces Vertical) To Be Continued
- 3. Worksheet: Static Torque Type I Try
- 4. Static Torque Problem: Type II (Includes Forces at Angles)
- 5. Worksheet: Static Torque Type I

Science 10

Monday, October 1/18



1. Check

Worksheet #5 - Ionic Compounds Summary
Worksheet - Lots of Ionic Naming Practice Problems
- Extra Practice if Required

- 2. FA Types of Ions and Ionic Compounds
- 3. Covalent Bonds
- 4. Diatomic, Homonuclear Molecules and Other Special Molecules
- 5. Naming Binary Molecular Compounds
- 6. Worksheet Binary Molecular Compounds #1 Worksheet Binary Molecular Compounds #2
- 7. Ionic vs Molecular Compounds
- 8. Worksheet Mixed Ionic/Covalent Compounds #1 Worksheet Mixed Ionic/Covalent Compounds #2
- 9. Topics SA Chem #2 Atoms to End of Compounds

Topics: SA - Chem #2

Н

- 1. atoms -> electrically neutral: $\#p^+ = \#e^-$
- 2. chemical names and symbols: elements and ions
- 3. periodic table of the elements: location of metals, nonmetals and metalloids
- 4. atomic number = number of protons
- 5. draw a Bohr-Rutherford diagram for an atom of an element
- 6. ions atoms that have gained or lost electrons
 - cations/positive ions/metallic ions
 - anions/negative ions/nonmetallic ions
 - be able to state number of protons, number of electrons and ion charges
- 7. draw a Bohr-Rutherford diagram for an ion of an element
- 8. ionic bond created by transfer of electrons
- 9. be able to identify monatomic ions, polyatomic ions and ions of multivalent metals
- 10. ionic compounds electrically neutral
- 11. be able to write the names of simple binary ionic compounds given their formulas and vice versa
- 12. be able to write the names of ionic compounds containing polyatomic ions given their formulas and vice versa
- 13. know roman numerals 1-10
- 14. be able to write the names of ionic compounds containing multivalent metals given their formulas and vice versa
- 15. be able to write the names of ionic compounds containing multivalent metals and polyatomic ions given their formulas and vice versa
- 16. covalent bond created as a result of the sharing of electron pairs
- 17. molecular compounds = covalent compounds = molecules
- 18. prefixes 1-10
- 19. diatomic molecules: H₂, N₂, O₂, F₂, Cl₂, Br₂, I₂
- 20. special molecules: P₄, S₈, water, ammonia, hydrogen peroxide
- 21. be able to write the names of binary molecular compounds given their formulas and vice versa
- 22. identify ionic compounds and molecular compounds