## Science 9 Tuesday, January7/20

http://mvhs.nbed.nb.ca/

#### **Exams**

#### STEM - Thursday, February 6/20 (Morning)

- 1. Activity: Human Genetic Disorders -> Continue
  - -> Due: Friday, Dec. 20/19
  - -> 1 Day Late
- 2. Crossword Puzzle Cellular Processes (Optional)
- 3. Can Genetic Conditions be Cured?
- 4. Biotechnology
- 5. Genetic Engineering Notes
  - Video Clips To Be Continued
  - Pros and Cons
    - Handout and Graphic Organizer

## Physics 112

Tuesday, January 7/20

http://mvhs.nbed.nb.ca/

### **Exams**

- 1. Return:
  - FA Gravitational Potential Energy
    FA Change in Gravitational Potential Energy
    before break
- 2. Questions?

Worksheet: Types of Energy and Work-Energy Theorems

- -> Elastic Potential
- -> Mandatory Problems
- 3. FA Elastic Potential Energy Due: Wed., Jan. 8/20
- 4. The Law of Conservation of Energy To Be Continued
- 5. Worksheet Systems and Conservation of Energy
- 6. FA Mechanical Energy No LC Required FA Conservation of Energy
- 7. SA Work, Types of Energy, W = △ E, Conservation of Energy
   Date: Tuesday, Jan 15/20
- 8. Exam Review Topics
  - Format
  - Problems

#### Physics 122 Tuesday, January 7/20

http://mvhs.nbed.nb.ca/

#### **Exams**

- 1. Return:
  - SA SHM and Projectiles
- 2. Questions?

Worksheet - Electric Charge and Coulomb's Law

- -> Electric Charge
- -> Coulomb's Law 2 Charges
- 3. Coulomb's Law 3 Charges Finish Example (b) for tomorrow.
- 4. Electric Fields
- 5. Strength (Intensity) of an Electric Field
- 6. Review Gravitational Potential Energy
- 7. Electric Potential Energy
- 8. Electric Potential Difference
- 9. Unit 3 Section 2: Electric Circuits
- 10. Potential Difference and Flowing Charge
- 11. Electric Current
- 12. Circuit Symbols
- 13. Conventional Current vs. Electron Flow
- 14. Ammeters vs Voltmeters
- 15. Resistance to Flow of Charge
- 16. Ohm's Law
- 17. Series Circuits
- 18. VIR Chart
- 19. Parallel Circuits
- 20. Complex/Combination Circuits

## Science 10 Tuesday, January 7/20

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

# **Bus Supervision - After School Exams**

- 1. Worksheet Acceleration Problems Worksheet -> Freely Falling Bodies
- 2. Optional Extension -> Worksheet Acceleration , Velocity and Time
- 3. Topics Physics #3
- 4. Review SA Physics #3
- 5. SA Physics #3 Date: Friday, Jan. 10/20

## **Topics - SA: Physics #3**

- 1. definitions: scalar quantity, distance, speed, vector quantity, reference point, position, displacement, constant velocity, resultant displacement, average velocity, acceleration
- 2. directions: positive (east, north, up, right) negative (west, south, down, left)
- 3. physical quantities: type, symbol and unit
- 4. determine the slope of a line using:

$$m = \underline{rise} \qquad OR \qquad m = \underline{y_2 - y_1} \\ \underline{x_2 - x_1}$$

- 5. identify types of motion:
  - 1. uniform (constant velocity)
  - 2. uniformly accelerated motion (changing velocity) x acci is constant
- 6. answer questions about position vs. time graphs
- 7. draw a velocity vs. time graph given a position-time graph
- 8. answer questions about velocity vs. time graphs
- 9. describe the motion of an object by comparing the directions of the object's velocity and acceleration
- 10. solve word problems:
  - (i) displacement
  - (ii) constant velocity
  - (iii) average velocity
  - (iv) acceleration (including feely falling boly)