- April 13 Report Cards Go Home (Wednesday)
- April 14 Parent-Teacher (Thursday after school)
- April 29 Professional Learning Day (Friday)
- May 5 NBTA Meetings (Thursday)
- May 6 NBTA Council Day (Friday)
- May 23 Victoria Day (Monday)
- May 27 Professional Learning Day (Friday)

Physics 112 Tuesday, April 5/16

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Explain That Stuff - April 8/16 Midterm - April 21/16 (Thursday)

- 1. Test Unit 1 -> Wednesday, April 6/16
 See the outline on the next two pages.
 MC and Problems
- 2. Check -> Worksheet Practice Problems (PP) C4 Page 137: 1-4
- 3. Four More Forces
- 4. Types of Forces
- 5. Free Body Diagrams (FBDs)
- 6. Assignment: U2-S1

Topics: Test Unit 1

- 1. kinematics
- 2. two types of physical quantities:
 - (i) scalar quantity has magnitude only
 - examples of scalar quantities
 - (ii) vector quantity has magnitude and direction
 - examples of vector quantities
 - know which directions are positive and which are negative by convention
- 3. arrows are used to represent vector quantities
- 4. definition of resultant
- 5. two methods used to add vector quantities:
 - (i) tip-to-tail method
 - (ii) parallelogram method
- 6. use rubric to determine a resultant graphically
- 7. use rubric to determine a resultant analytically
- 8. two types of frames of reference:
 - (i) stationary/fixed
 - (ii) moving
- 9. motion vocabulary and definitions
- 10. use signs of velocity and acceleration to describe an object's motion, etc
- 11. two types of motion
 - (i) uniform
 - (ii) uniformly accelerated motion

R VIt freely felling body 2 problems

Topics: Test Unit 1 (Continued)

- 12. position-time graphs interpret graphs
 - identify type of motion
 - slope = velocity
 - determine if/when an object changes direction
- 13. velocity-time graphs interpret graphs
 - identify type of motion
 - slope = acceleration
 - area -> distance and displacement
 - be able to calculate average speed, average velocity and average acceleration
 - identify if/when an object changes direction
- 14. word problems follow checklist to obtain full value
 - uniform motion 1 formula
 - uniformly accelerated motion 4 formulas
 - quadratic formula
- 15. acceleration due to gravity influenced by mass of planet and distance from planet
 - symbol -> \overrightarrow{g}
 - on Earth \overrightarrow{g} = -9.80 m/s²
 - assuming no air resistance when working with freely falling bodies
 - interpret ball toss graphs



Science 122

Tuesday, April 5/16

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Midterm - April 28/16 (Thursday)

- 1. Quiz -> Ray Diagrams for Spherical Mirrors
- 2. Check -> Worksheet: Red Text Spherical Mirrors
- 3. Lenses
- 4. Convex Lens
- 5. Images Formed by Convex Lenses
- 6. Worksheet: Convex Lens Ray Diagrams HW
- 7. Concave Lenses and The Images They Form
- 8. Lens Equation, Magnification and Sign Conventions
- 9. Red Text -> C18 Page 381 PP #14-16 Page 383 - PP #17-19

Page 387 - Review #1, 6, 9, 10, 12, 13 Applying Concepts #3-8 Problems #2, 4, 5, 7, 8, 9, 10, 13, 14

Science 10

Tuesday, April 5/16

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

- Lab Types of Reactions, Gas Collection and More
 4 Days Late
- 2. Check -> Rearranging Equations -> Worksheet 1st Column Metric Conversions -> Worksheet - 1st Column
- 3. Experiment: Measurement and Significant Digits
 - Each person submits a lab sheet for marking.
 - Due -> Today, April 5/16
- 4. Quiz Start of Physics to the End of Metric Conversions
 Topics
 Tentatively Thursday
- 5. Physical Quantities: Distance, Time, Speed
- 6. Uniform Motion
- 7. Graphing Basics
- 8. Worksheet Finding Slope From a Graph
- 9. Distance vs Time Graph
- 10. Slope and Speed
- 11. Activity Tumble Buggies

Conversions

1.000 \$ 2.500 Km 26000M
0.50 M 0.027 Kg +0.0565 Km
0.027 Kg +0.0565 Km
1.4 x 10 tm 1.18 x 10 5
1.0 x 10 tm 0.075 L

Quiz Topics

- 1. definitions: physics, kinematics, linear motion, physical quantity defining equation
- 2. SI System International System of Units
 - know the SI base units for length, time and mass
- 3. certainty identify certain and uncertain digits in a measurement
 - determine the certainty of a measurement by stating its number of significant digits
- 4. rules Certainty Rule (multiply and divide)
 - Precision Rule (add and subtract)
 - round answers to appropriate number of SDs
- 5. rearrange an equation for a specified variable
- 6. perform metric conversions using conversion factors

Physical Quantities

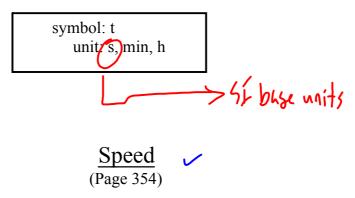
Distance (Page 340)

<u>Distance</u> is the amount of space between two objects or points.



<u>Time</u>

<u>Time</u> is the duration between two events.



Speed is the rate of motion - how fast an object is moving. ✓

symbol: v unit: <u>m</u>, <u>km</u> s h

<u>Instantaneous speed</u> is the speed at which an object is travelling at a particular instant.

Uniform Motion

An object has <u>uniform motion</u> when it is travelling in a straight line with constant speed.

Physics 122 Tuesday, April 5/16

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Explain That Stuff - April 8/16

- 1. Assignment: U1-S3& 4 -> Tuesday, April 5/16
- 2. Test Unit 1 -> Friday, April 8/16
- 3. Experiment 10.2 Torques (Page 67)
 Experiment 9.1 Conservation of Momentum (Page 55)
- 4. Unit 2 Projectiles, Circular Motion, Law of Gravitation, SHM

Test Pib. -> Force -> push/puel > sign > inclined plane . Torque > State equilibrium 6 problems lonin/prob. no angles / angles (1) helstire Vel. > bout /place 1 > intersection Collisions | Expl -> 1> Lelastic/inelastic) -> 2D