Science 122

Friday, November 4/16

Midterm - Tuesday, Nov. 15/16

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

http://mvhs-sherrard.weebly.com/

1. Check -> Worksheet - Archimedes' Problems
2. Review - Hydrostatics
3. Summative Assessment - Hydrostatics
   - Wed. Next Week. Nov. 9

Physics 112

Friday, November 4/16

Midterm - Wednesday, Nov. 9/16

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

http://mvhs-sherrard.weebly.com/

1. Conference Schedule
2. Midterm - Questions?
3. Check -> Text - C10 - Page 485: PP#19-21
4. Atwood's Lab - Outline
5. Newton's Third Law of Motion
6. Midterm Review

7. U2S3 - Introduction to Momentum
   - Momentum
   - Impulse

Physics 112
Midterm Outline

1. Find $\vec{R}$ analytically. (rubric)
2. Answer questions re a velocity-time graph. ⇒ max $\vec{v}$
3. Solve a freely falling body problem. max v.
4. Solve a first law problem.
5. Solve two second law problems

$\vec{a} = -2.0\,m/s^2$
$2.0\,m/s^2$, W

$\vec{a}$
d, $\vec{d}$
ave speed $\frac{d}{t}$
ave vel.
ave acl

$\vec{v}_i = 0\,m/s$
$\vec{a} = -9.8\,m/s^2$
acceleration due to gravity
$\vec{d} =$
$\vec{v}_f =$

$\vec{v}_i = \#\,m/s$

$\vec{v}_i = \pm$ m/s.

$\vec{v}_f = \vec{v}_i + \vec{a}t$
$=$

$\vec{v}_f^2 = \vec{v}_i^2 + 2\vec{a}\vec{d}$
$\vec{v}_f = \sqrt{\vec{v}_i^2 + 2\vec{a}\vec{d}}$
$\vec{v}_f = \pm$ ⇒ final vel
WS ⇒ WS 10 m/s, down

Newton's First Law.
rest
const. vel / speed
uniform motion
* FBD.
*

Newton's Second Law
* Acceleration
(speeding up / slowing down)

$\vec{F}_{net} = m\vec{a}$

$\vec{F}_{net} = m\vec{a}$
$\vec{F}_{net} = m\vec{a}$ + kinematic equation ✓
$\vec{F}_{net} = m\vec{a}$ + $\vec{F}_A, \vec{F}_f, \vec{w}, \vec{T}, \vec{N}$ ✓

Physics 122

Friday, November 4/16

Midterm - Tuesday, Nov. 8/16

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

http://mvhs-sherrard.weebly.com/

1. Return -> SA - U1 S3&4 -> Monday
2. Midterm - Questions?
3. Experiment 9.1 - Conservation of Momentum (Page 55)
   - Due - Monday, Nov. 7/16
4. Unit 2 - Section 1 - Projectiles

Science 10

Friday, November 4/16

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

http://mvhs-sherrard.weebly.com/

1. Questions? Worksheet - Rearranging Formulas
2. Physics - Quiz #1- Topics
   - Wednesday, Nov. 9/16
3. Rubric - Roller Coasters
4. Metric Conversions
5. Worksheet - Metric Conversions - HW - First Sheet

Science 10

Physics - Quiz #1

1. definitions: physics, kinematics, linear motion, physical quantity, SI System, defining equation
2. base units of distance, time and mass
3. determine a measurement's number of significant digits
4. round measurements to a specified number of SDs
5. use the Certainty and Precision Rules
6. rearrange equations for a specified variable
7. perform metric conversions

m s kg

$v = \frac{d}{t}$ [t]

$v_f = v_i + at$ [a]

$E_s = \frac{1}{2} k x^2$ [K] [x]