Science 10
Wednesday May 31/17

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

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

1. Assignment - Tangled Web: 1 Day Late

2. Article - Indicator Species: Due - Thursday, June 1/17

3. DDT

4. The Day They Parachuted Cats Into Borneo

5. Bioaccumulation and Biomagnification

6. Roller Coasters

Physics 112
Wednesday, May 31/17

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1. Exam Review - Freely Falling Body

2. Check -> Worksheet - Waves: Frequency, Period and Wave Speed

3. Concepts: U4 S2 - Wave Behaviours

4. Reflection

5. Diffraction

6. Refraction

7. Case #1

8. Case #2

9. Case #3

10. Snell's Law

11. Worksheet - Refraction

Exam Review - Freely Falling Body   0.600 m

A football game customarily begins with a coin toss to determine who kicks off. The referee tosses the coin up. In the absence of air resistance, the coin will rise to a maximum height of 1.276 m. How high is the coin after only 0.139 s?

max height 1.276 m $\vec{v_f} = 0$ m/s

$\vec{v_f}^2 = \vec{v_i}^2 + 2\vec{a}\vec{d}$

$\vec{v_i}^2 = -2\vec{a}\vec{d}$

$\vec{a} = -9.80$ m/s^2 $\vec{v_i} = \sqrt{-2\vec{a}\vec{d}}$

$\vec{v_i} = \sqrt{-2(-9.80)(1.276)}$

$\rightarrow \vec{v_i} = 5.00$ s $\vec{d} = \vec{v_i}t + \frac{1}{2}\vec{a}t^2$

$t = 0.139$ s

$\vec{d} = ?$ $\vec{d} = (X) + \frac{1}{2}(X)^2$

$\vec{a} = -9.80$ m/s^2 $\vec{d} = 0.600$ m

$\rightarrow$ The height of the coin was

0.600m.

$\vec{d} = \uparrow$ 0.150 m $t = ?$

            $\vec{a} = -9.80$ m/s^2

O $\vec{v_i} = 5.00$ m/s

$\vec{d} = \vec{v}t + \frac{1}{2}\vec{a}t^2$ $\left|\begin{array}{l} \vec{v_f}^2 = \vec{v_i}^2 + 2\vec{a}\vec{d} \\ \vec{v_f} = \underline{\hphantom{xxxx}} \\ \hline \vec{v_f} = \vec{v_i} + \vec{a}t \\ t = \end{array}\right.$

quadratic eq.

$+$

quad. formula

Physics 122
Wednesday, May 31/17

Exam Review - Static Torque

1. SA - U3 S1 -> Wednesday, May 31/17

2. Resistance to Flow of Charge

3. Worksheet - Resistance

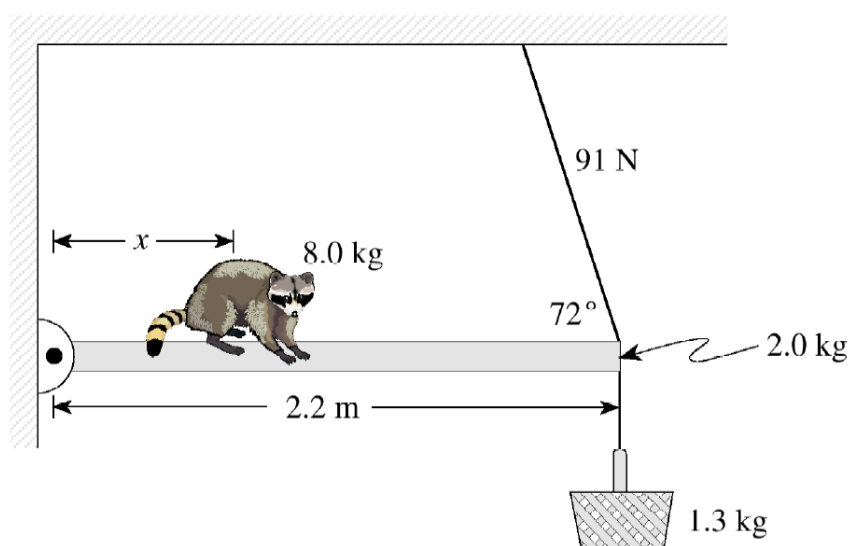4. Ohm's Law

5. Power

6. Series Circuits

Exam Review - Static Torque   1.8 m

A hungry 8.0 kg raccoon walks out on a 2.0 kg, 2.2 m long uniform beam in an attempt to reach a 1.3 kg food basket hanging at the end. A cord that can withstand 91 N is used to support the beam at the end as shown.

What is the maximum distance, x, the raccoon can walk out onto the beam before the cord breaks?