Put out Engineering pads

Welcome *to* Honors Physics

(we gonna dance tonight)
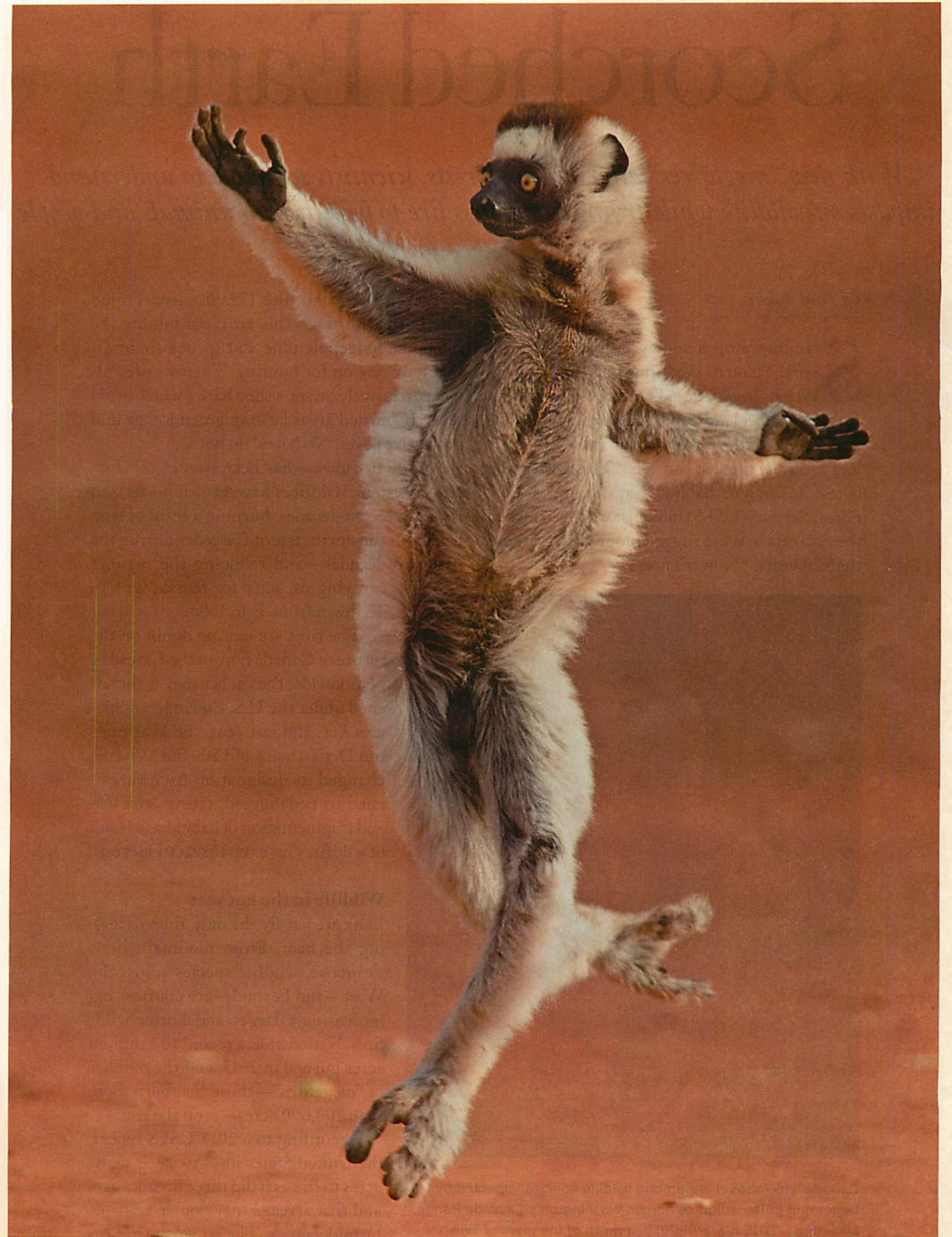
a cartoon a day . . .

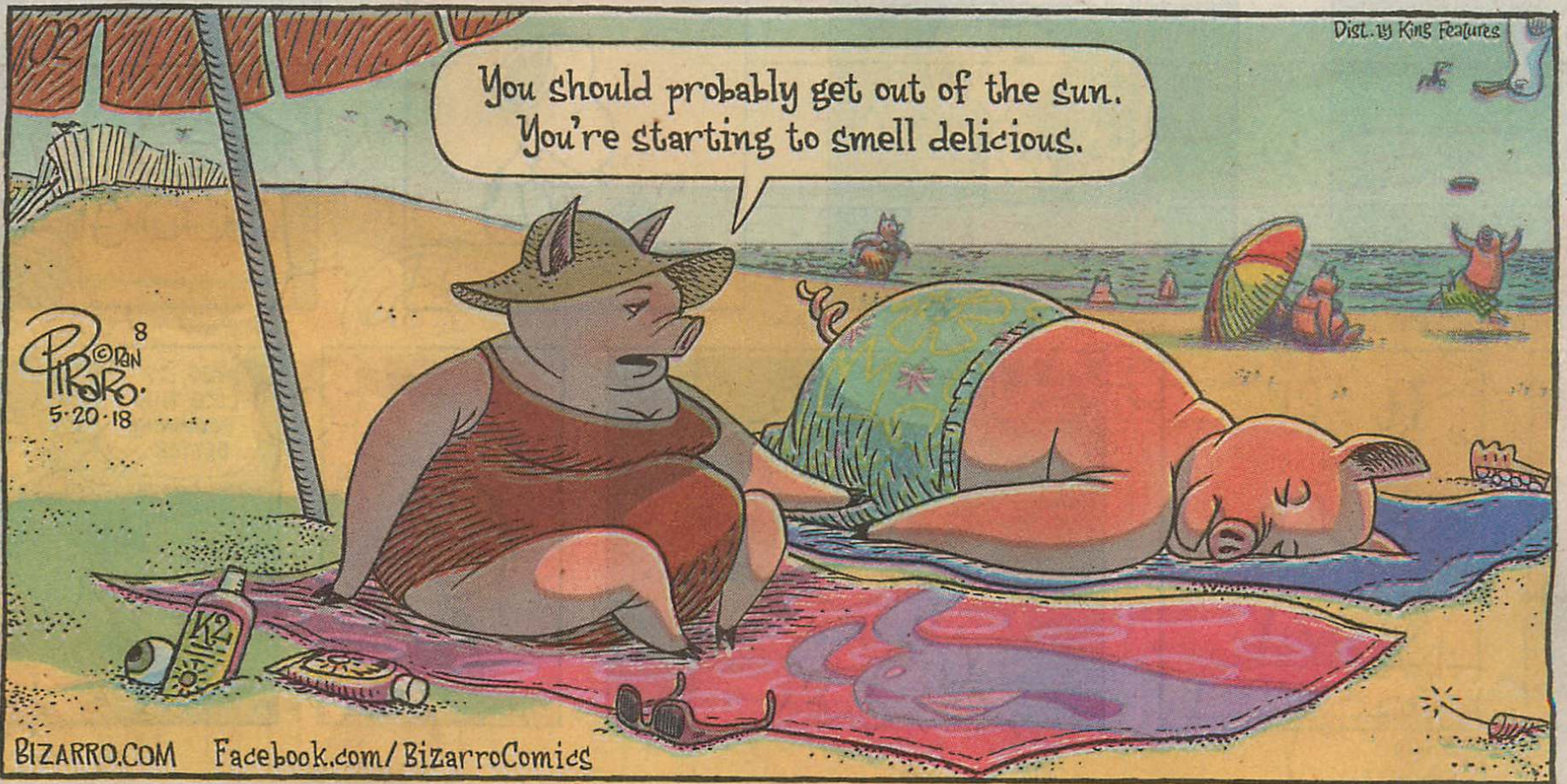*a cartoon a day . . .*

Honors Physics

Questions about Preamble
        http://faculty.polytechnic.org

Get pdf of OpenStax text (problem-numbering problem)

First test will be on Thursday, Sept 5. It will cover graphs and one-dimensional kinematics. See calendar for further insight as to what you will be expected to do.

Shy to right

Nudged to right

Anxious to right

No, you can't really multi-task . . . (cell phones verboten)

College rep policy

Period A's L-day is Day 3; Period E's is Day 5

Time

Homework

Survey for 5 points . . .
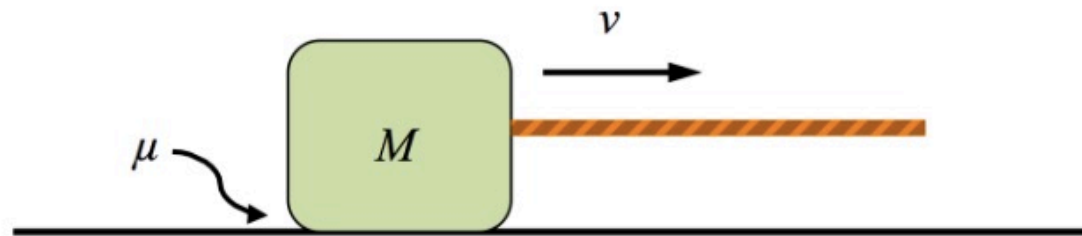
How to succeed

ADVERSARIES?

We are a family. We are on the same team. If you don't succeed, I don't succeed. My JOB is to help you master the world of physics. If you need help, COME TALK TO ME . . .

For some grizzlies, wildlife conservation efforts are just right.

Mr. White's site . . .

Question:
A horizontally-oriented rope is used to pull a box (mass M) across the rough surface of a floor, at constant velocity v. If the coefficient of kinetic friction between the floor and the box is μ, the Power applied by the rope is

   a. Mv
   b. μMv
   c. μMgv
   d.   slightly greater than μMv, to overcome friction
   e.   Power can't be calculated without knowing how much time the box was pulled

Answer:
The correct answer is *c*. The average Power applied by the rope over some period of time can be calculated as

$$P = \frac{W}{t},$$

Grades

*You're going* to have some *really* hard material to be learned here.

Grades on tests, even if you study really well, will probably be lower than you might be used to in other classes—that's normal.

Part of my job is to make sure that your overall grade fairly represents your work, partly based on how well you do on tests but also based on how well you do with labs and homework.

desperation
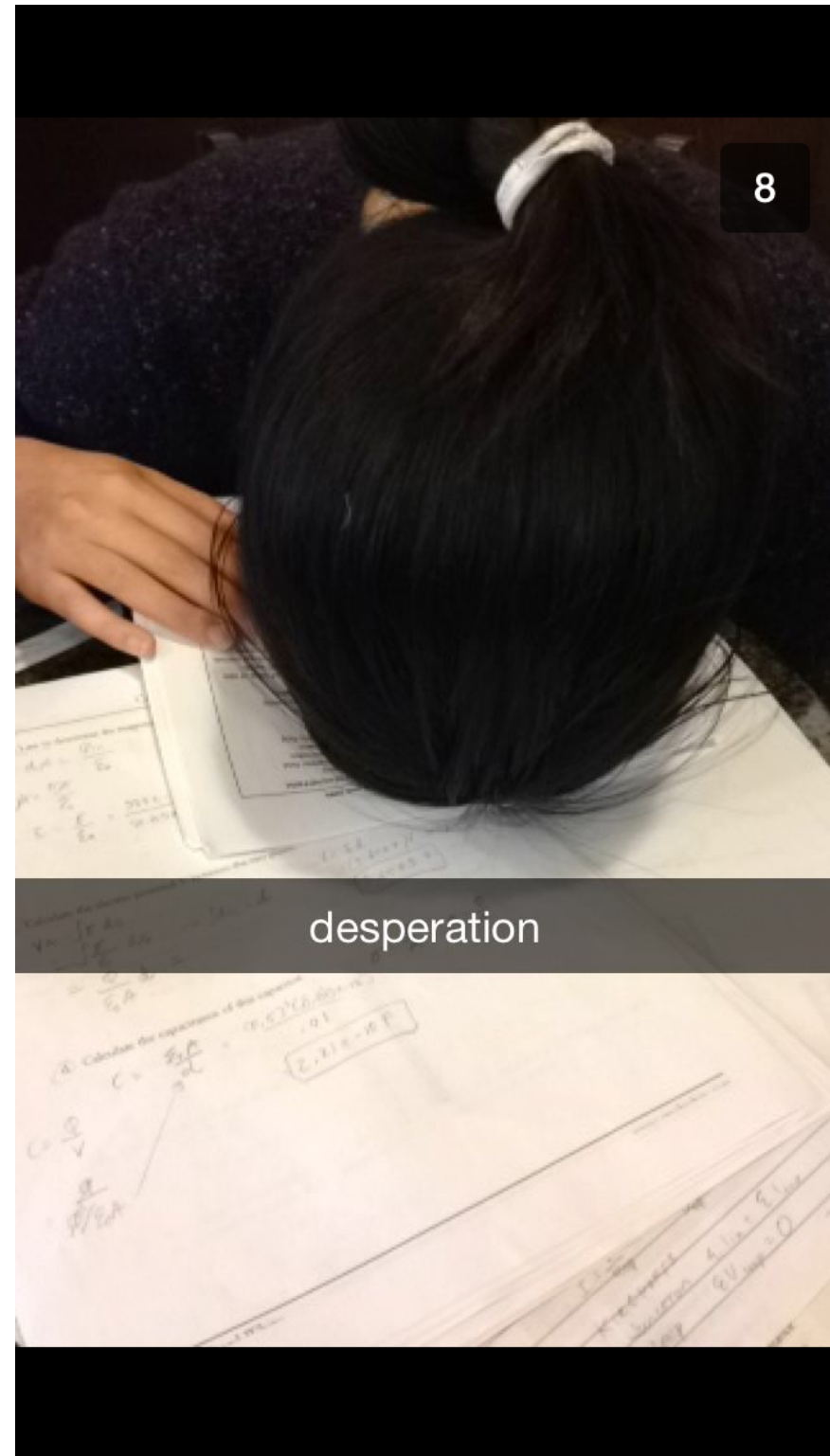
Other Stuff

- My office: upstairs, Poly 205 (West end)

- My schedule: C, D, F

- Available: before school, A, B, E, G, Community Time, after school by appointment; also, I don't live in my office—if you know you will be looking for me, let me know in advance so I can be sure I'll be where you can find me . . .

- Restroom protocol

- Absences

- Tardies: "Hard stop, soft start"

Schedule on websites...

SEP **2** My Day ▾   **Classes** 6 Classes ▾   **Groups** 7 Groups ▾   **Resources**   **News** ▾   **Calendar**   **Directories** 6 Directories ▾

AP Physics C: Mechanics (F) - 76-1 (SciC) ≡↓

Bulletin Board   Topics   **Assignments**   Grade Book   Roster

| < | > | Today | Day | Week | **Month** | | | ≡ List | 🔊 | 🖨 | ⧉ ▾ |

○ Assigned   ◉ Active   ○ Due   **+ Assignment**

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2 Study for test	3	4	5
				Read Sec 3.1-3.3; do problem 3.1		
6	7	8 problems 3.3, 3.7, 3.11, 3.13; Download Lab: Kinematics	9	10 Complete lab assignment	11	12
			problems 3.15, 3.19, 3.23, 3.41		problems 4.1, 4.3, 4.5, 4.7	
13	14 HW: 4.9, 4.11, 4.15, 4.17, 4.19, 4.21, 4.23	15 HW: 4.31, 4.32	16	17	18 HW: Complete lab assignment; Download Practice Test	19
		HW: 4.27, 4.30		HW: 4.36, 4.37, 4.40, 4.42; Download Lab: Catch the Ball		

Schedule on websites...

9/4	9/5	9/6	9/7	9/8
LABOR DAY HOLIDAY	**L-day 3** **CLASS doesn't meet:** 1.)	**CLASS:** (day 1 of rotation) 1.) do *Cart* Lab (L-1) (acceleration of cart)	**CLASS:** 1.) do Reflection Activity; 2.) talk briefly about formalized presentation of position, velocity and acceleration vectors (covered in first few sections of Ch 4); 3.) introduce 2-d projectile motion with cannon problem; 4.) Book Sections: 4.1, 4.2 and 4.3	**L-day 3** **CLASS:** 1.) in-class Quiz--Speed 2.) *centripetal acceleration* and uniform circular motion (show old school video); 3.) *radial* and *tangential unit vectors*; 4.) relative velocity and acceleration--graphical analysis; 5.) Book Sections: 4.4, 4.5 and 4.6
	HMWK: 1.)	**HMWK:** 1.) do Probs 3.19, 3.23, 3.41; 2.) complete lab write-up if not finished in class (this will be due on Friday)	**HMWK:** 1.) do Probs 4.1, 4.3, 4.5, 4.7 and 4.9	**HMWK:** 1.) do Probs 4.11, 4.15, 4.17, 4.19, 4.21 and 4.23;

9/11	9/12	9/13	9/14	9/15
L-day 3 **CLASS:** 1.) continue with topics from previous day; 2.) possibly show motoGP video; 3.) possibly do *2-d Air Table* Lab--determine radial and tangential acceleration of point on the curve . . . 4.) Book Sections: 4.4, 4.5 and 4.6	**CLASS:** 1.) do *To Catch a Ball* Lab (L-3) (run and shoot lab)	**Day 6**	**CLASS:** **Test 2** (Ch's 3 and 4 -- vectors and 2-d kinematics)	**CLASS:** 1.) island series LAB-- (protractor and incline); 2.) intro to Newton; 3.) mass; 4.) N.F.L. and N.S.L.; 5.) Book Sections: 5.1, 5.2, 5.3 and 5.4
HMWK: 1.) do Probs 4.27, 4.30, 4.31 and 4.32; 2.) download LAB--*To Catch a Ball* Lab (L-3)	**HMWK:** 1.) do Probs 4.36, 4.37, 4.40 and 4.43; 2.) **CHIPOTLE NIGHT from 5:30 to 7:00 PM**		**HMWK:** 1.) take a break	**HMWK:** 1.) do Probs 5.1, 5.3, 5.5, 5.7 and 5.13; 2.) download Practice Test

9/18	9/19	9/20	9/21	9/22
L-day 3 **CLASS:** 1.) *gravitational force*;	**CLASS:** 1.) N.S.L. problems: 2.) Book Section: 5.7	**CLASS:** 1.) do *NSL (Incline)* Lab (L-):	**Day 6**	**CLASS:** 1.) N.S.L. problems: 2.) Book Section: 5.7

The "class pdfs" file has changed...

CLASS pdfs

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What follows are pdf's of some of the powerpoint presentations that have been given in class along with homework assignments.

Folder for Kinematics in One Dimension.pdf's
Folder for Kinematics in Two Dimension.pdf's
Folder for Newton's Laws.pdf's
Folder for Centripetal Forces.pdf's
Folder for Energy pdf's
Folder for Momentum and Collision pdf's
Folder for Rotational Motion pdf's
Folder Vibratory Motion pdf's
Folder Wave Motion pdf's

Semester Exam Instructions and Equations pdf

Folder for Electrostatic Forces and Fields pdf's
Folder for Electric Potentials and Energy Considerations.pdf's
Folder for DC Circuits.pdf's
Folder for Magnetic Fields pdf's
Folder for Faraday's Law and Magnetic Induction pdf's
Folder for AC Circuits and RMS Values pdf's
Folder for Semiconductors pdf's
Folder for Robotics Section
Folder for Radios

MAGIC MOUNTAIN information

ENERGY pdfs

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What follows are pdf's of some of the powerpoint presentations that hav

XtraWrk Problems for Energy Considerations (Ch 5)

Work/Energy Theorem
Conservsation of Energy Derivation
Loop-the-Loop w Centr. Force and Energy
Ice Dome Problem(s)
Pendulum Problem
Springs
Energy Problem From Hell
Energy Summary
Test Summary
Multiple-Choice Test for Energy pdf
Problem 5.1
Problem 5.4
Problem 5.5 (good work problem)
Problem 5.6
Problem 5.9
Problem 5.15
Problem 5.18
Problem 5.23
Problem 5.25
Problem 5.36
Problem 5.39 (spring gun)
Problem 5.50
Problem 5.60

CLASS pdfs

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- Folder Vibratory Motion pdf's
- Folder Wave Motion pdf's
- Semester Exam Instructions and Equations pdf
- Folder for Electrostatic Forces and Fields pdf's
- Folder for Electric Potentials and Energy Considerations.pdf's
- Folder for DC Circuits.pdf's
- Folder for Magnetic Fields pdf's
- Folder for Faraday's Law and Magnetic Induction pdf's
- Folder for AC Circuits and RMS Values pdf's
- Folder for Semiconductors pdf's
- Folder for Robotics Section
- Folder for Radios
- MAGIC MOUNTAIN information

2-d KINEMATICS pdfs

Lectures

Problems and Solutions for 2-d Kinemetics (Ch 3)

LECTURES
Section 2 -- Two-Dimension Kinematics

C Period:

pdf's

9 Sept L-1 (vectors and 2-d kin)
10 Sept L-2 (solving projectile probs and lab set-up)
11 Sept L-3 (Tilted Table analysis and more projectile practice)
12 Sept L-4 (To Catch a Ball lab)
13 Sept L-5 (vectors and projectile test practice)

D Period:

pdf's

6 Sept L-1 (vectors and 2-d kin)
9 Sept L-2 (solving projectile probs and lab set-up)
10 Sept L-3 (Tilted Table analysis and more projectile practice)
11 Sept L-4 (To Catch a Ball lab)

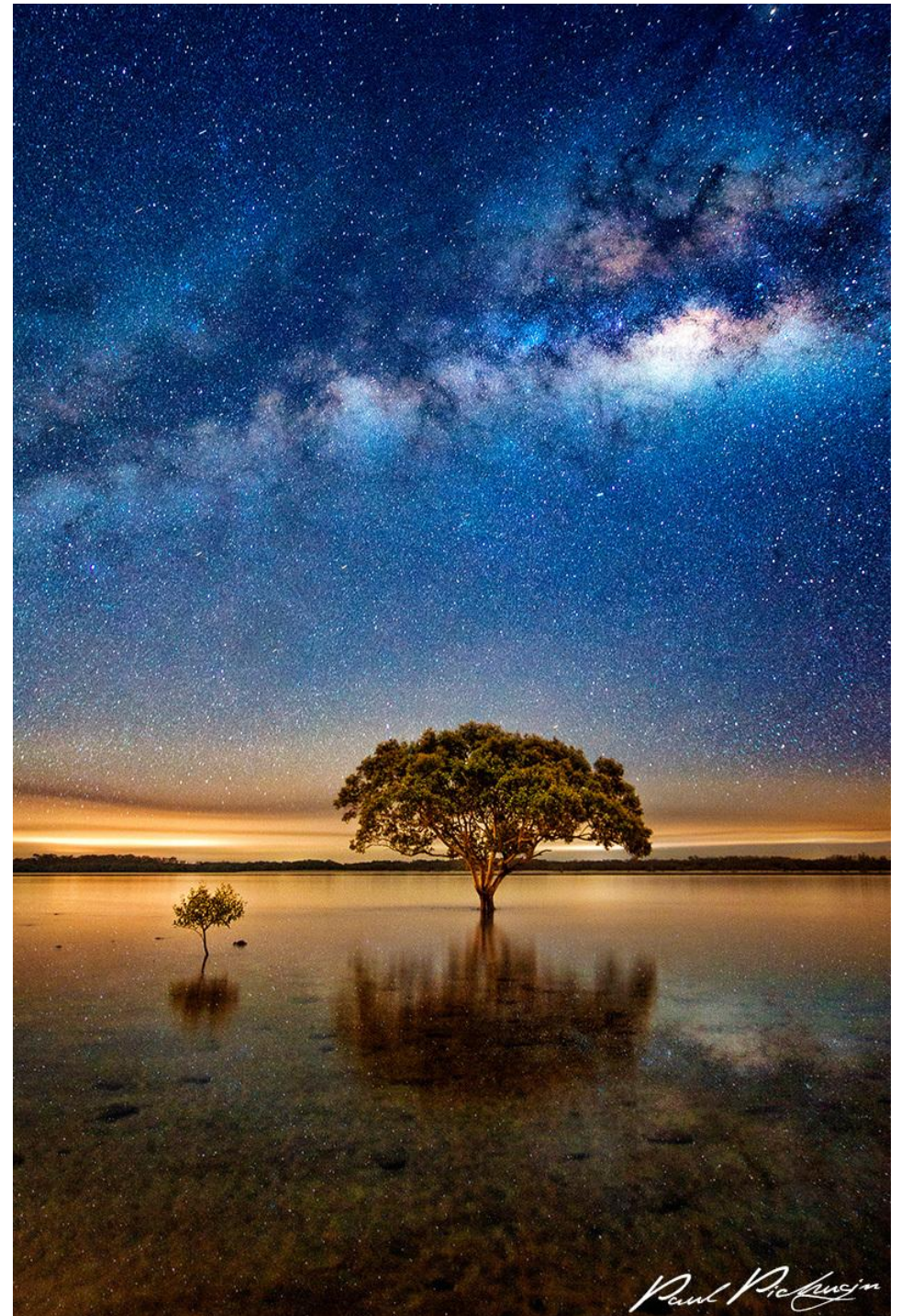# LIGHTEN UP, FOLKS. IT'S NOT AS THOUGH YOU'RE ENTERING A GREAT, SCARY PLACE!

THINK OF IT MORE AS HOME--A COMFY, COZY PLACE.

A PLACE WHERE YOU CAN ROMP ENTHUSIASTICALLY.

WHERE YOU CAN TAKE A MOMENT TO STAND IN WONDER.

WHERE YOU CAN OCCASIONALLY BURY YOURSELF IN WORK.

AND FEAR NOT AS IT WON'T BE AS PAINFUL AS HAVING A BABY, OR PULLING A WISDOM TOOTH WITHOUT NOVACAINE, OR LOSING TO PREP, AND THERE WILL BE AN END IN SIGHT

. . . SOMETIME AROUND 24,000,000 SECONDS FROM NOW, AT THE END OF THE SCHOOL YEAR.

SO KEEP SMILING LADS AND LASSIES, CAUSE LIFE COULD BE WORSE . . . (AFTER ALL, YOU COULD BE A PHYSICS TEACHER)

:)

guided mind imagery