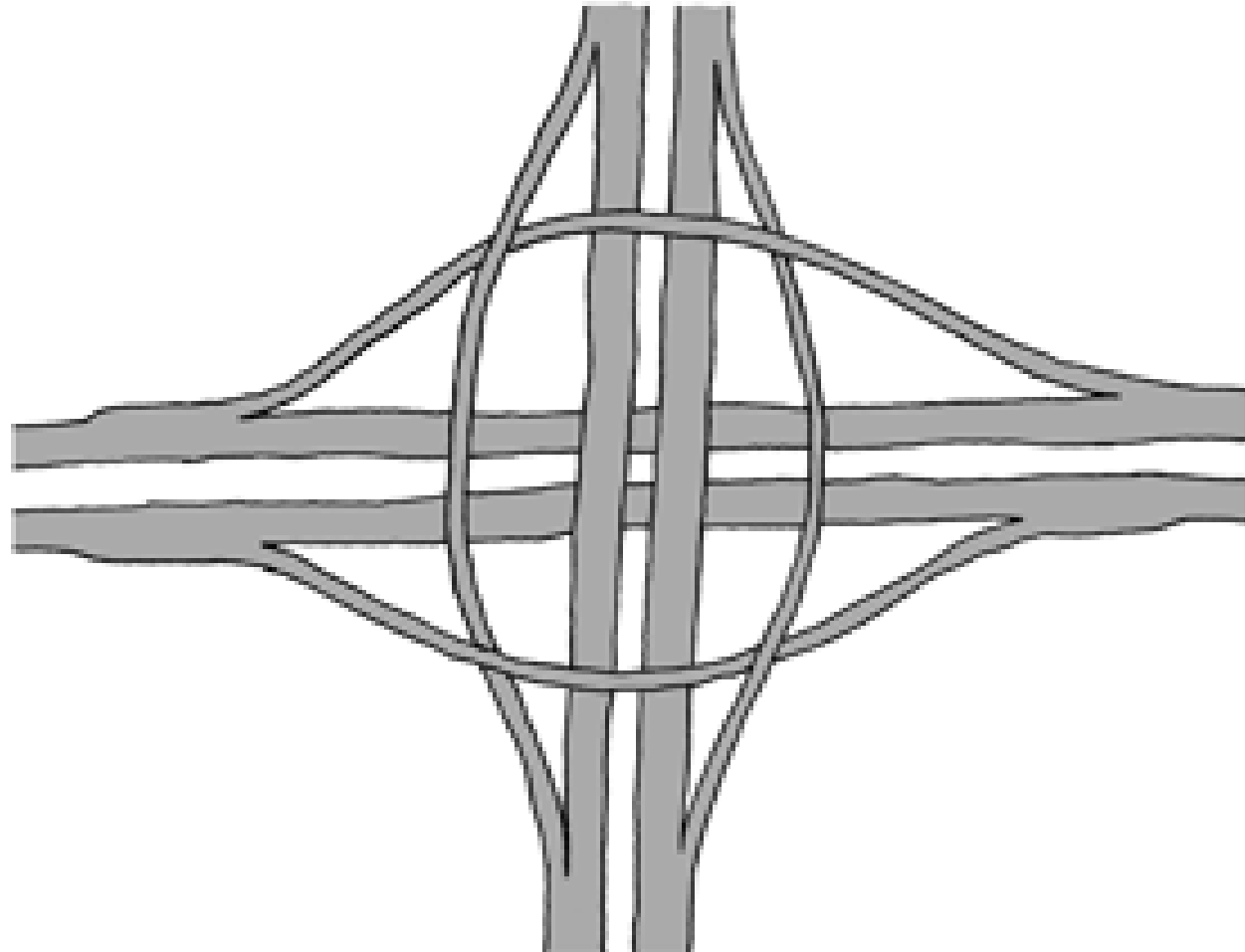


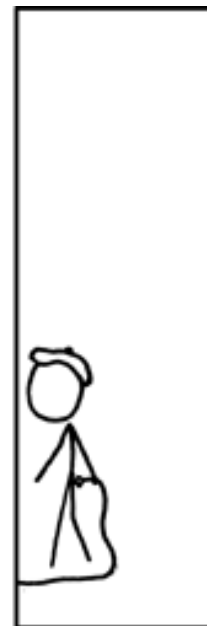
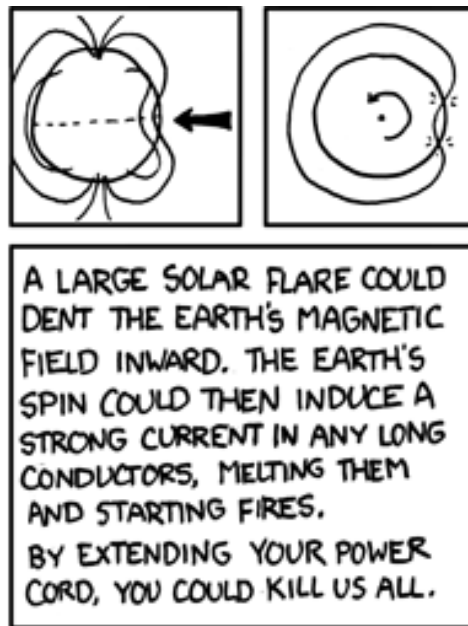


Advanced Hashbrown Maker

HIGHWAY ENGINEER PRANKS:

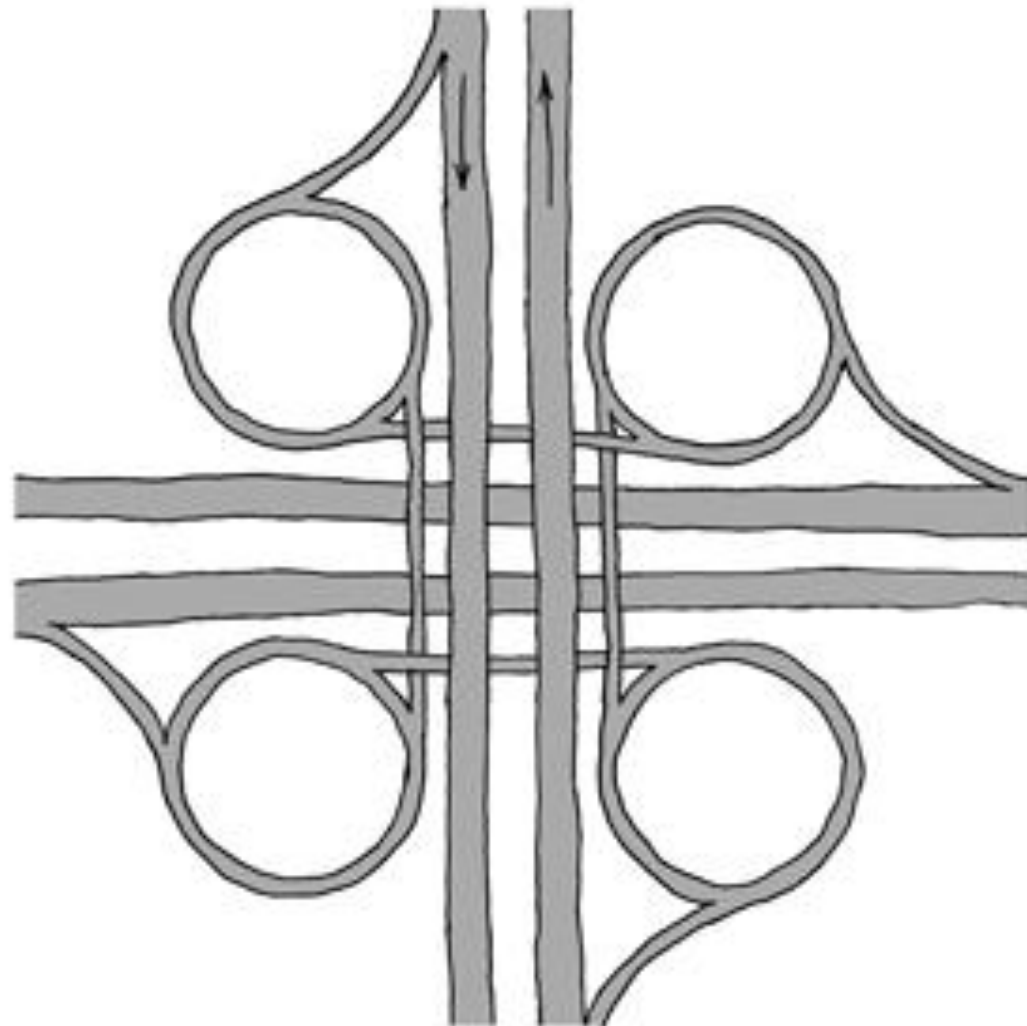
THE ZERO-CHOICE INTERCHANGE:





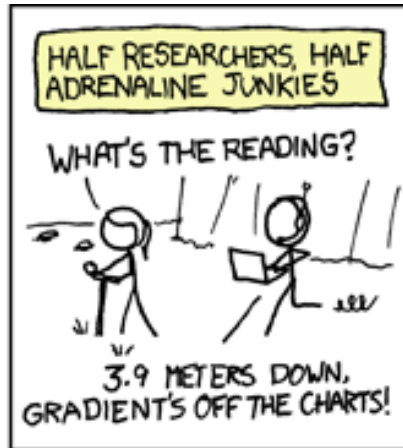
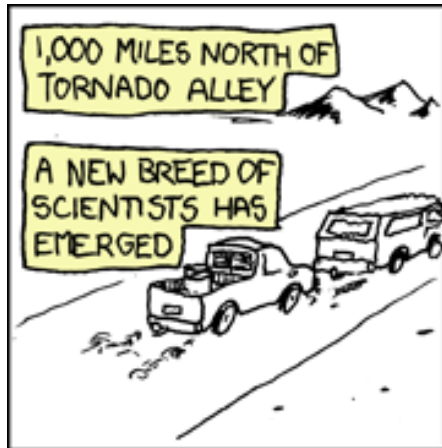
HIGHWAY ENGINEER PRANKS:

THE INESCAPABLE CLOVERLEAF:

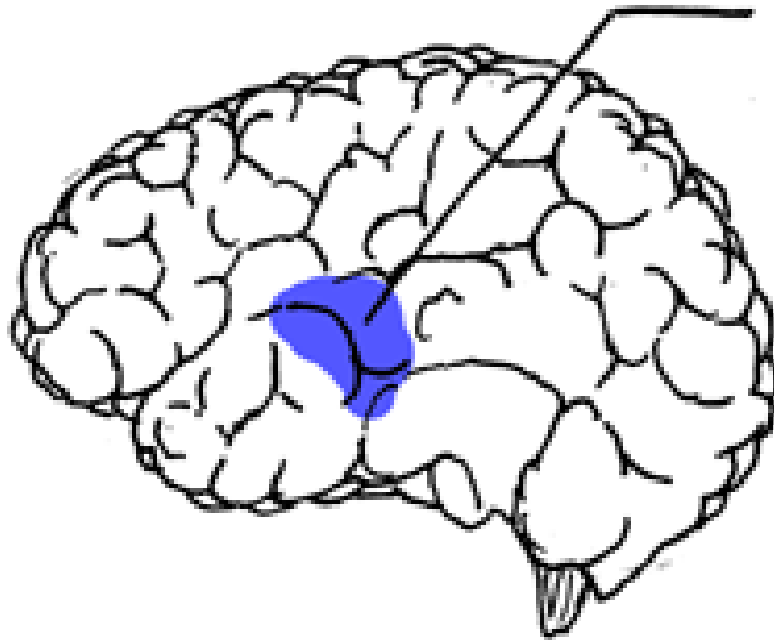




Meat Cereals



MY BRAIN

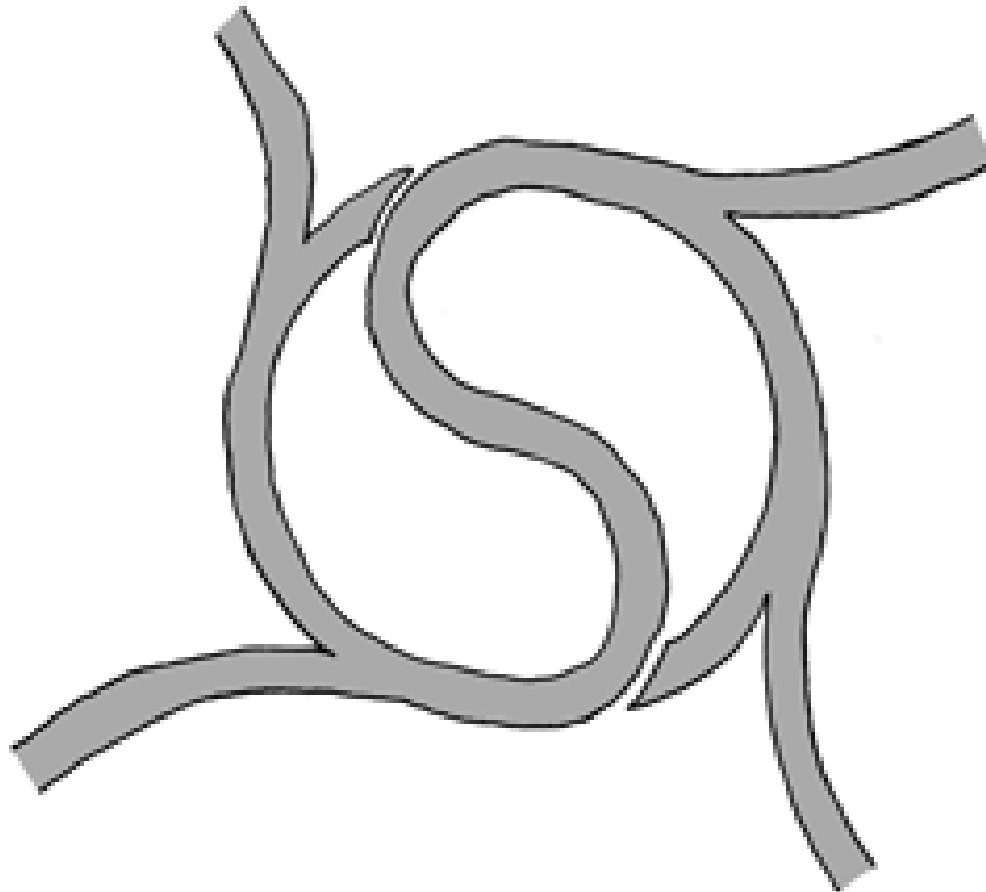


SECTION THAT IS DEVOTED,
NO MATTER WHERE I GO IN
LIFE, TO PLANNING THE
ULTIMATE TREEHOUSE*.

* OH MAN, IT WOULD BE LIKE SWISS
FAMILY ROBINSON, BUT WITH MULTIPLE
TREES CONNECTED BY... HEY, COME UP
TO MY ROOM AND SEE THE BLUEPRINTS!

HIGHWAY ENGINEER PRANKS:

THE ROTARY SUPERCOLLIDER:



CAN A NINJA CATCH AN ARROW?
ON THIS EPISODE, WE'LL FIND OUT!



BRAAAAAIIINNS..

ZOMBIE FEYNMAN! YOU GOT A PROBLEM WITH MYTHBUSTERS?

THEY FAIL AT BASIC RIGOR!



"IDEAS ARE TESTED BY EXPERIMENT." THAT IS THE CORE OF SCIENCE. EVERYTHING ELSE IS BOOKKEEPING.



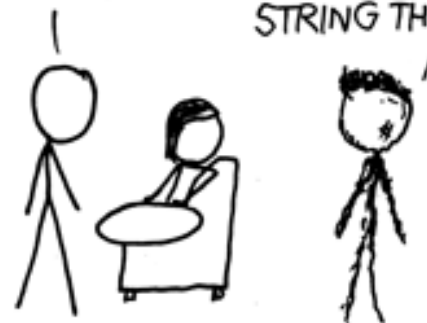
BY TEACHING PEOPLE TO HOLD THEIR BELIEFS UP TO EXPERIMENT, MYTHBUSTERS IS DOING MORE TO DRAG HUMANITY OUT OF THE UNSCIENTIFIC DARKNESS THAN A THOUSAND LESSONS IN RIGOR.

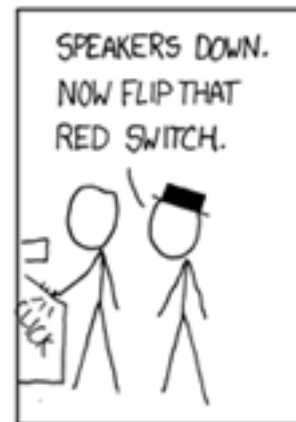
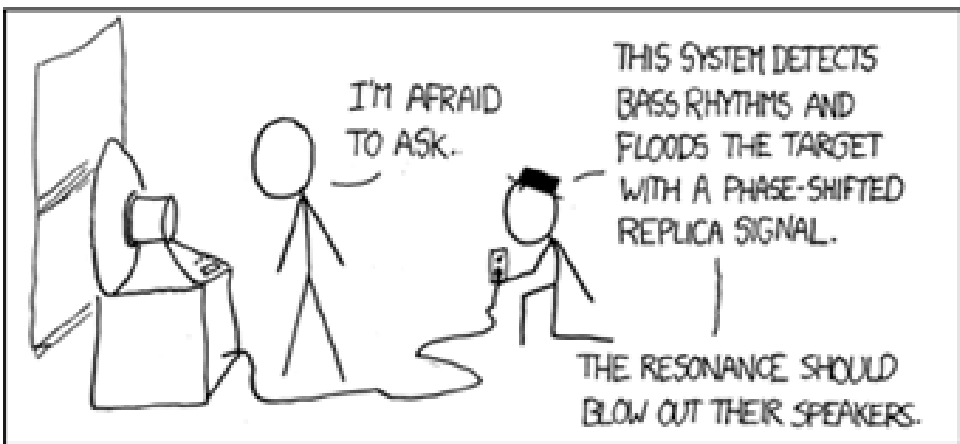
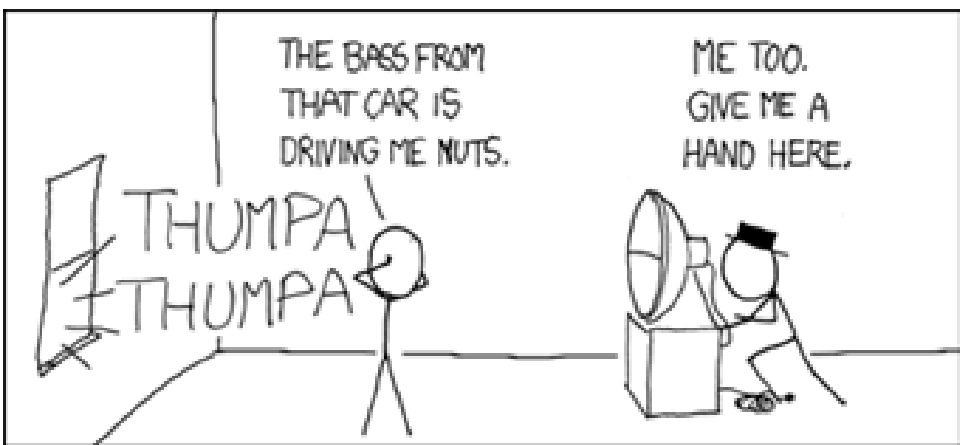


ANYWAY, BACK TO ZOMBIE STUFF. I HUNGER FOR BRAAAAAIIINNS!

UH, TRY THE PHYSICS LAB NEXT DOOR.

I SAID BRAINS. ALL THEY'VE GOT ARE STRING THEORISTS.

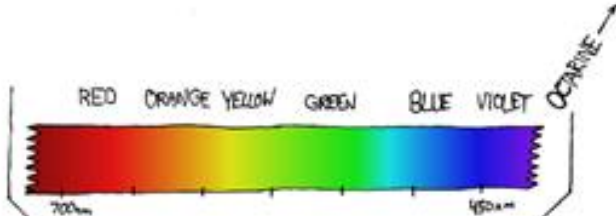




THE ELECTROMAGNETIC SPECTRUM

THESE WAVES TRAVEL THROUGH THE ELECTROMAGNETIC FIELD. THEY WERE FORMERLY CARRIED BY THE AETHER, WHICH WAS DECOMMISSIONED IN 1897 DUE TO BUDGET CUTS.

ABSORPTION SPECTRA:



VISIBLE LIGHT

OTHER WAVES:

SLINKY WAVES

SOUND WAVES

AUDIBLE SOUND

20 Hz to 20 kHz

THAT HIGH-PITCHED NOISE IN EMPTY ROOMS

THE WAVE

SHOUTING CAR DEALERSHIP COMMERCIALS

CIA (SECRET)

HAM RADIO

KOSHER RADIO

SPACE RAYS CONTROLLING STEVE BALLMER

99.3 "THE FOX"

101.5 "THE BAGGEL"

104.3 "THE FROTHEN SQUARLE"

24/7 NPR PEEPER DRIVES

AM (LO)

VHF

UHF

FHF

CELL PHONE

CANCER RAYS

ALIENS

SETI

WIFI

BRAIN WAVES

GRAVITY

SOLARSES

SUPERMAN'S HEAT VISION

20X BLACK'S HEAT VISION

SUNLIGHT

MAIN DEATH STAR LASER

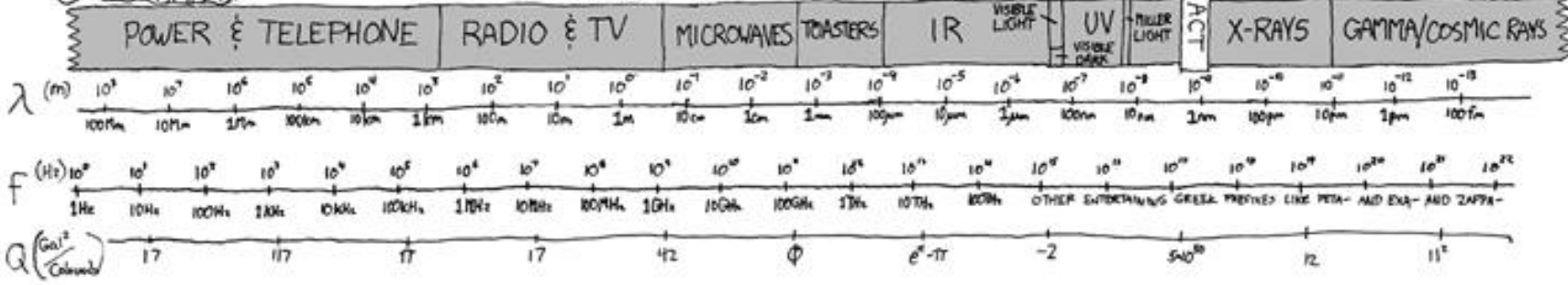
POTATO

BLOGORAYS

MAIL-ORDER X-RAY GLASSES

SINISTER GOOGLE PROJECTS

CENSORED UNDER PATRIOT ACT



I'VE HEARD THAT WHEN THE WRIGHT BROTHERS ARGUED, THEY PERIODICALLY SWITCHED SIDES IN THE DEBATE TO TRY TO ENCOURAGE A MORE BALANCED CONCLUSION.

WE SHOULD TRY THAT IN OUR RELATIONSHIP!



IT'S A NEAT IDEA, BUT I THINK TREATING PERSONAL ISSUES LIKE A DEBATE WILL ONLY ENGENDER HOSTILITY AND HURT FEELINGS.



NO, I THINK IT WOULD HELP, BY FORCING US TO CONSIDER THE OTHER PERSON'S POINT OF VIEW.



HMM, MAYBE YOU'RE RIGHT.

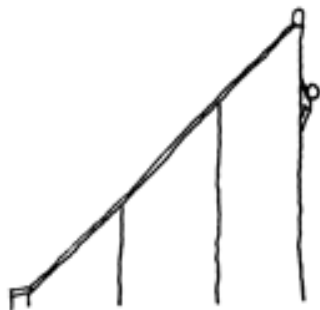
AM NOT. IT'S A BAD IDEA.



WHEN I WAS A KID, MY SCHOOL PLAYGROUND HAD A REALLY TALL SLIDE THAT ALWAYS MADE ME NERVOUS.



WE MOVED AWAY, BUT THE SLIDE STUCK IN MY MEMORY, BECOMING A SKYSCRAPING MONSTER.

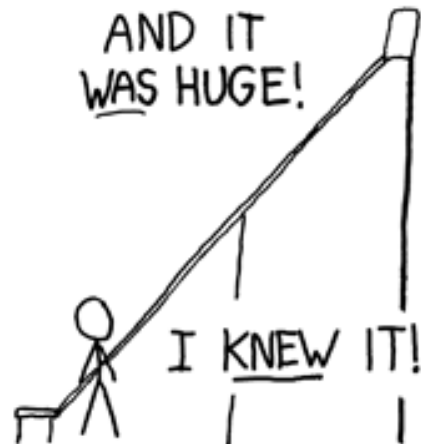


YEARS LATER, I WAS PASSING THROUGH MY OLD TOWN AND REMEMBERED THAT PLAYGROUND.



I DROVE TO THE SCHOOL TO SEE THE SLIDE THAT MY INNER SIX-YEAR-OLD THOUGHT WAS SO TOWERING.

AND IT WAS HUGE!



WHAT IF I HAD SOME
ICE CREAM? WOULDN'T
THAT BE AWESOME?

NO, STOP—



GREAT, YOU'VE TRAPPED US IN
A HYPOTHETICAL SITUATION!

MMM, ICE
CREAM.



MAYBE IF I HAD
A KNIFE I COULD
CUT OUR WAY FREE...



HERE, TAKE
THIS ONE.

MMM, ICE
CREAM!



MY DAD WAS ALWAYS THE ONE WHO TAUGHT ME ABOUT SCIENCE,
BUT LOOKING BACK, I'M STARTING TO REALIZE HOW MUCH MY
NERDINESS WAS INFLUENCED BY MY MOM.

MOM, CAN I HAVE A SNACK
IN MY ROOM BEFORE BED?

NO, DEAR. YOU KNOW YOU ONLY GET
THAT PRIVILEGE WHEN YOUR AGE IS
ONE LESS THAN A MULTIPLE OF THREE.



WANNA SEE AN OPTICAL ILLUSION?



HOLD YOUR KEYBOARD UP
IN FRONT OF YOU AND
LOOK AT THE HOME ROW.



NOW CROSS YOUR EYES A LITTLE
SO THE 'G' AND 'H' OVERLAP.



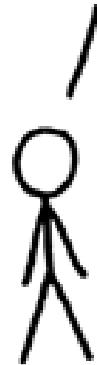
KEEPING FOCUSED, LIFT THE
KEYBOARD OVER YOUR HEAD.



EWW!

HA HA

YES, FROM THE EVIDENCE IT LOOKS PRETTY LIKELY TO ME THAT WE'RE CAUSING GLOBAL WARMING ON A HORRIFIC SCALE. BUT WITH SCIENCE YOU DON'T NEED TO ARGUE. IT DOESN'T MATTER WHO WINS THE DEBATE:- IT'S ABOUT REALITY. BY JUST WAITING A LITTLE LONGER, WE'LL GET TO SEE WHO WAS RIGHT. IT FEELS UNETHICAL, BUT I FIND MYSELF WANTING TO KEEP QUIET ABOUT THE SCIENCE JUST TO KNOW FOR SURE. AS TERRIBLE AS IT SOUNDS, THE STATE OF THE WORLD ISN'T REALLY MY RESPONSIBILITY. I'M JUST THRILLED TO GET TO WATCH. IF THE SCIENTISTS ARE RIGHT -- AND IF WE KEEP PEOPLE FROM UNDERSTANDING JUST A LITTLE LONGER -- WE'LL ENJOY QUITE A RIDE. AND PRAGMATICALLY, ON THE OUTSIDE CHANCE THAT THEY'RE ALL WRONG, I GET SAVED THE EMBARRASSMENT OF HAVING SPOKEN UP.



Playing Devil's Advocate to Win

WHAT ARE YOU DOING?

SPINNING COUNTERCLOCKWISE

EACH TURN ROBS THE PLANET
OF ANGULAR MOMENTUM

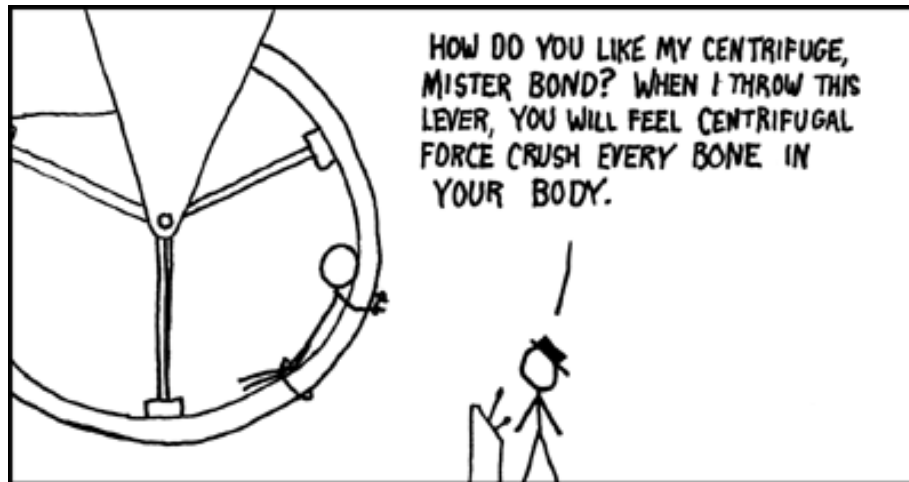
SLOWING ITS SPIN
THE TINIEST BIT

LENGTHENING THE NIGHT,
PUSHING BACK THE DAWN

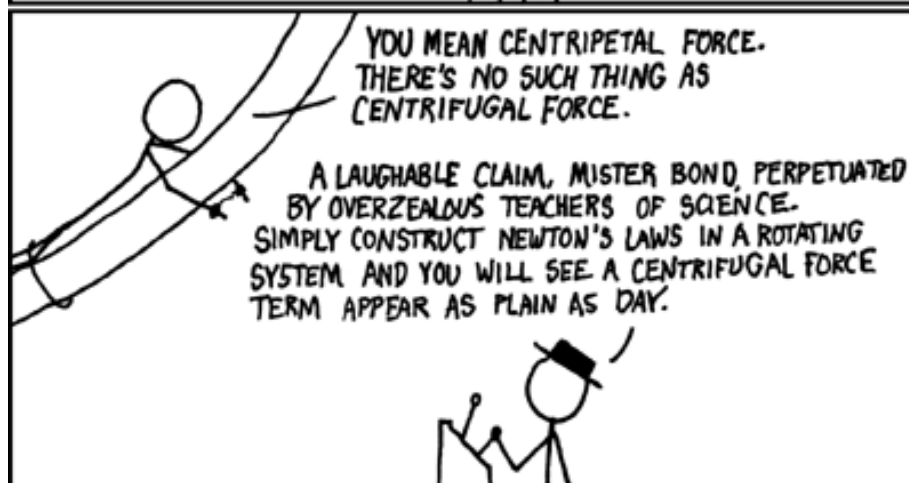
GIVING ME A LITTLE
MORE TIME HERE

WITH YOU

My future wife...



HOW DO YOU LIKE MY CENTRIFUGE,
MISTER BOND? WHEN I THROW THIS
LEVER, YOU WILL FEEL CENTRIFUGAL
FORCE CRUSH EVERY BONE IN
YOUR BODY.



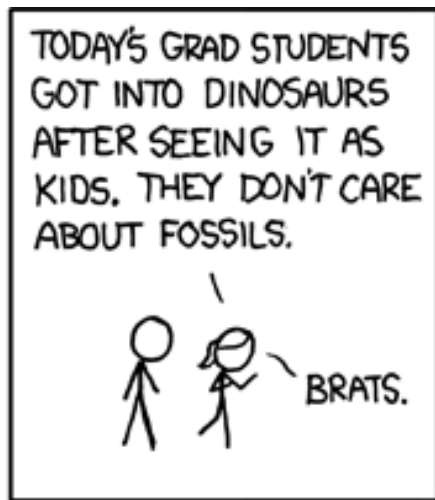
YOU MEAN CENTRIPETAL FORCE.
THERE'S NO SUCH THING AS
CENTRIFUGAL FORCE.

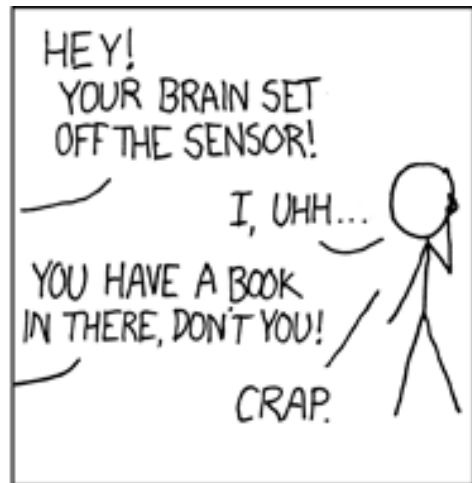
A LAUGHABLE CLAIM, MISTER BOND, PERPETUATED
BY OVERZEALOUS TEACHERS OF SCIENCE.
SIMPLY CONSTRUCT NEWTON'S LAWS IN A ROTATING
SYSTEM AND YOU WILL SEE A CENTRIFUGAL FORCE
TERM APPEAR AS PLAIN AS DAY.

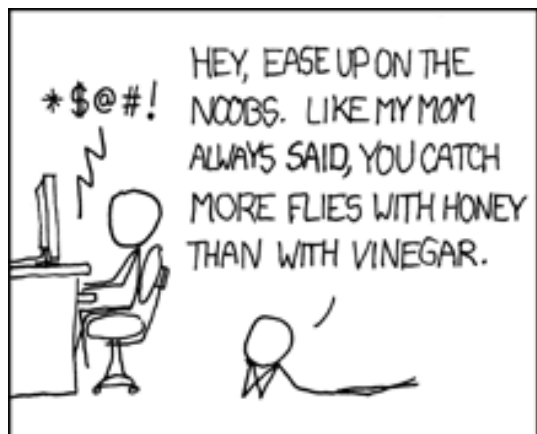


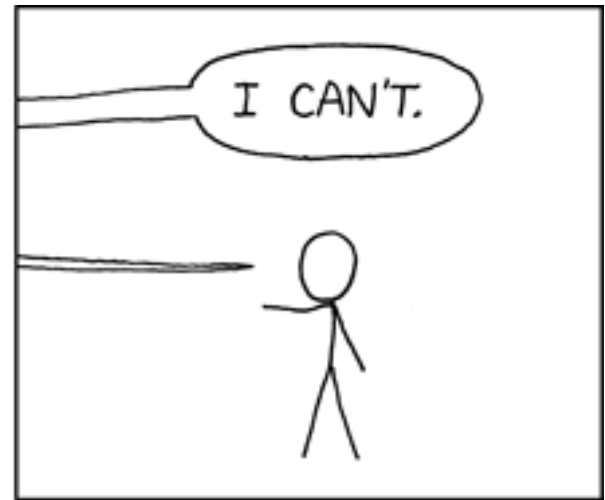
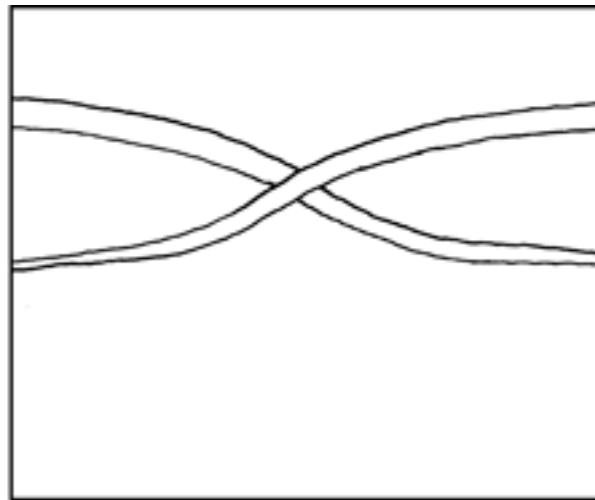
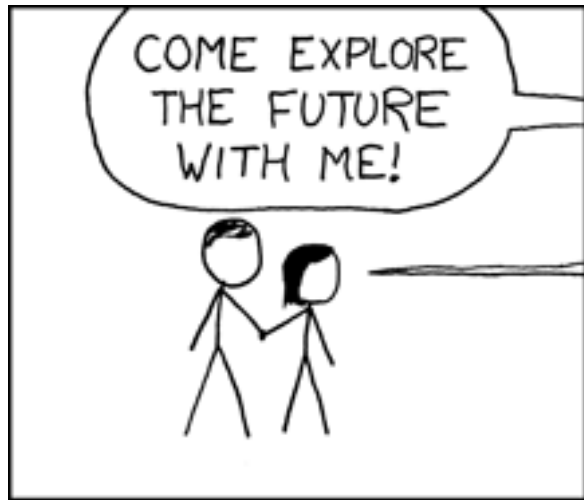
COME NOW, DO YOU REALLY EXPECT
ME TO DO COORDINATE SUBSTITUTION
IN MY HEAD WHILE STRAPPED
TO A CENTRIFUGE?

NO, MISTER BOND.
I EXPECT YOU TO DIE.











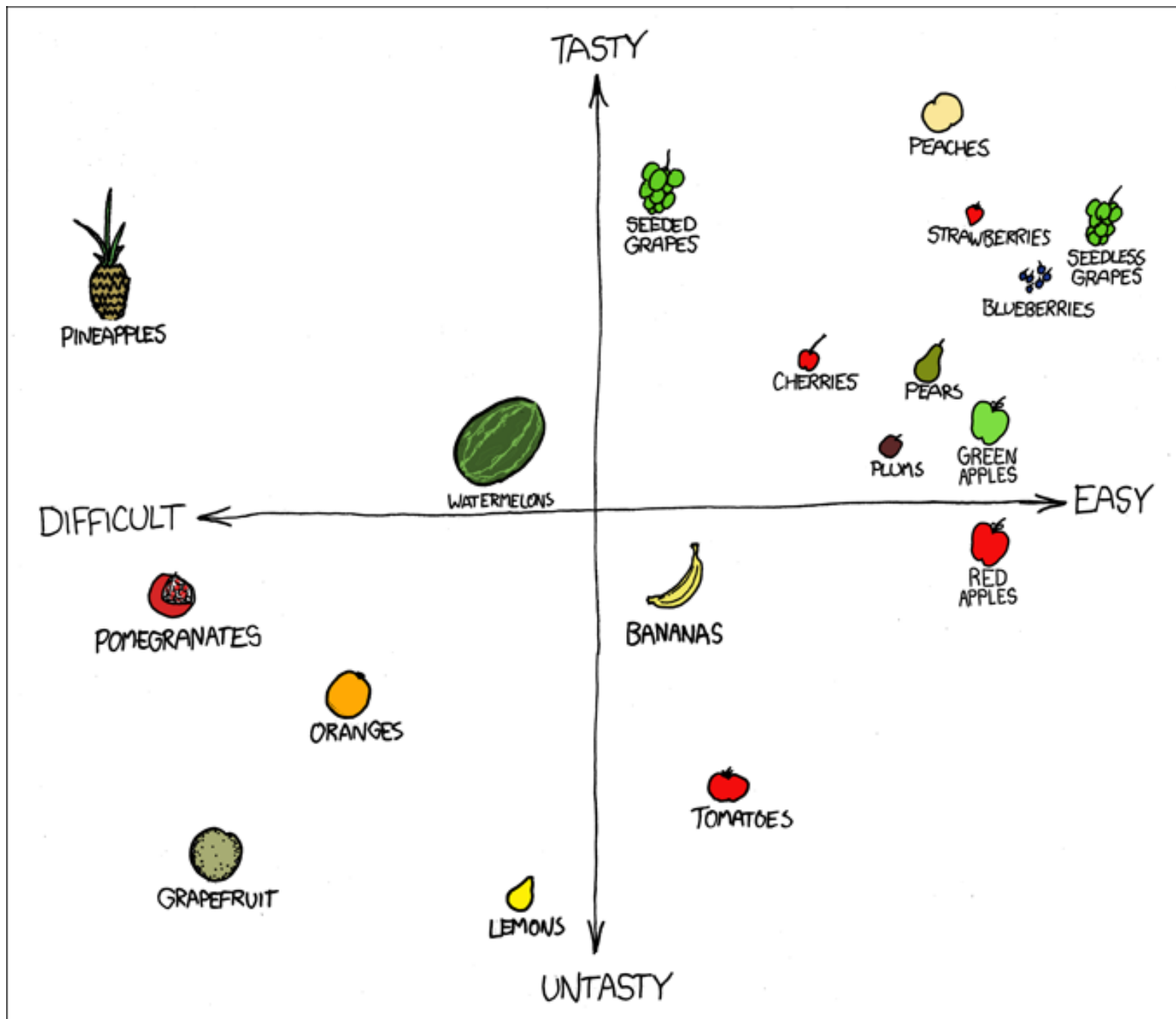
— IN SOLIDARITY WITH THE MANY AOL USERS WHOSE OFTEN EMBARRASSING WEB SEARCHES WERE RELEASED TO THE PUBLIC, I OFFER A SAMPLE OF MY OWN SEARCH HISTORY:



Web [Images](#) [Video](#) ^{New!} [News](#) [Maps](#) [more »](#)

[Advanced Search](#)
[Preferences](#)
[Language Tools](#)

velociraptors
site:imdb.com "jurassic park"
raptors
dromaeosaurids
utahraptor
"home depot" deadbolts
security home improvement
surviving a raptor attack
robert bakker paleontologist
robert bakker "possible raptor sympathizer"
site:en.wikipedia.org surviving a raptor attack
learning from mistakes in jurassic park
big-game rifles
tire irons
treating raptor wounds
do raptors fear fire
how to make a molotov cocktail
do raptors fear death
can raptors pick locks
how to tell if my neighbors are raptors



Odessa

Secondary Science PLC

2009



STAR WARS LAB

What is Problem-Based Learning with Technology?

1. A problem is identified which needs to be solved
2. Students go through a process to solve the problem
3. Students demonstrate their knowledge, often through the creation of some type of end product
4. Technology is used meaningfully in one or more of these stages

The Problem

- Usually higher-level thinking involved
- Answer a question
- Formulate an opinion
- Make a decision/provide a solution

The Process

- **Alone/partners/groups**
(importance of language/dialogue)
- **Information Sources**
(web/classroom, library/experiences)
- **Type of information**
(text/video/audio)
- **Time period**

Odessa

Secondary Science PLC

2009



REACTION LAB

Activity #1

The lab of
MR. Q

.PDF PRESENTATION

LAB WORKSHEET

WORKSHEET RUBRIC

Odessa

Secondary Science PLC

2009

CREATE A GRAPH

Odessa

Secondary Science PLC

2009



ONLINE STOPWATCH

Odessa

Secondary Science PLC

2009



PROJECTILE MOTION

Activity #2

Odessa

Secondary Science PLC

2009



PROCEDURE BLOCKS

Odessa

Secondary Science PLC

2009



GREENHOUSE GASES

Activity #3

Odessa

Secondary Science PLC

2009



JIGSAW VIDEOS

Odessa

Secondary Science PLC

2009



GAS PRESSURE

Activity #4

EXTRAS...

Freeware

EdTech Innovators

PBL STRATEGIES

MORE RESOURCES ONLINE!