

Inquiry-Based Skepticism for the Classroom

MATTHEW LOWRY - "THE SKEPTICAL TEACHER"



Yet MORE Inquiry Methods? Sheesh!

- It's more than just a buzzword, it's a critical part of the scientific process
- Inquiry isn't <u>always</u> the best method...
- ... but it's pretty damned good! ②
- Use a variety of methodologies that compliment inquiry
- Inquiry is amazing when done right, but it takes WORK (and lots of it) – so have fun with it!
- Combine wonder with inquiry and skepticism
- Don't expect educational "miracles" Take what you can get



Inquiry Methods – "Educational Empiricism"



- Francis Bacon, the father of empiricism
- In contrast to Descartes' rationalist method
- Incorporated more than deduction into reasoning
- Responsible for popularizing inductive reasoning into what we call "science"
- THIS MEANS <u>EXPERIMENTS!!!</u> ☺



Science As Investigative Inquiry



"Is THIS your card?!"

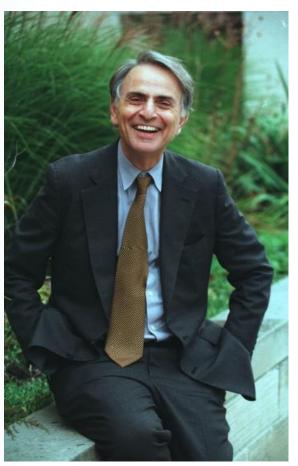


Slicing Away the BS – Occam's Razor





There's a Dragon in My Garage!

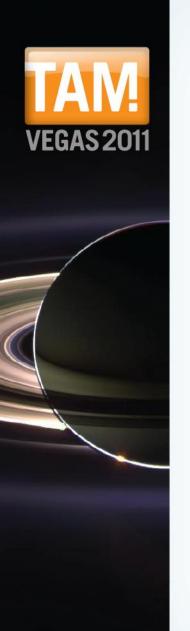






'Effing Magnets: How Do They Work?





Ouija Boards: How Do They Work?





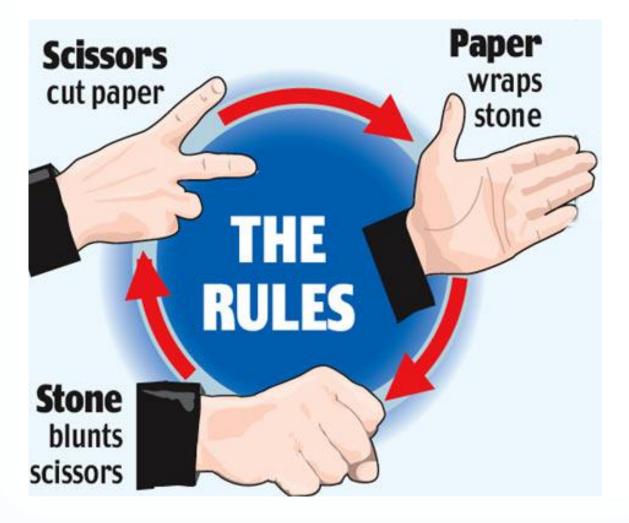
... Here's One Way: Magnetism!



See the clip on Youtube – <u>SkepticMM</u> channel: http://youtu.be/8uYqxhlObHg

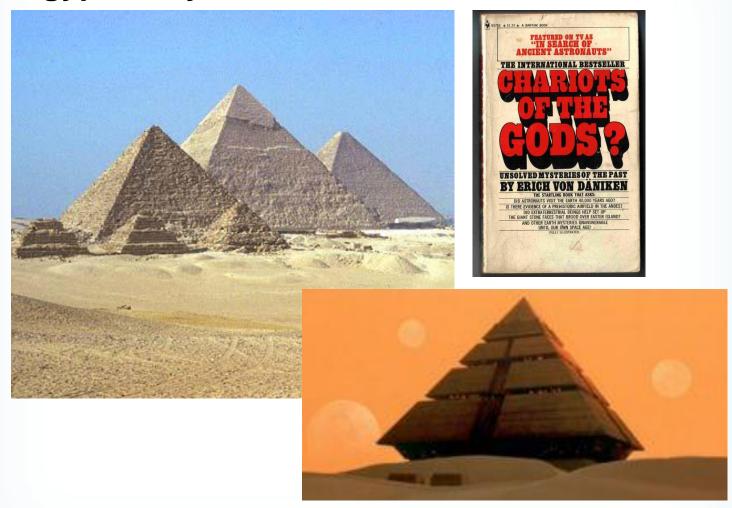


Time For A Trick: Nontransitive Dice ©





Egyptian Pyramids: Human-Made or "Alien"?





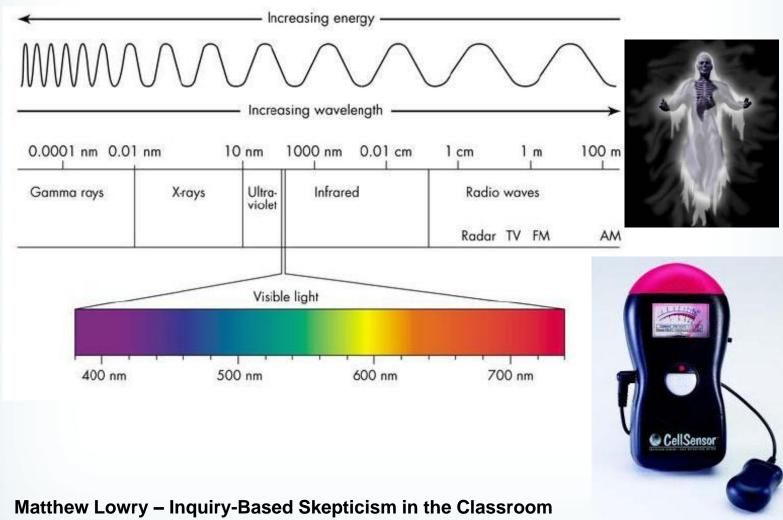
Board Breaking and Other "Miracles"



See the clip on Youtube – <u>SkepticMM</u> channel: http://youtu.be/vQSVHL4Qwe0

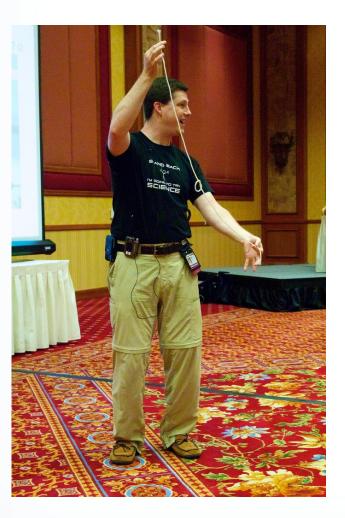


Ghost Hunters: "The Blair Witch Project" Was Better





Time for ANOTHER Trick: Self-Tying Knot? ©



See the clip on Youtube – SkepticMM channel: http://youtu.be/gzQQcOvQ9uE



Shameless Plug...

 ICBS Everywhere – if you want loot from this workshop and other sources, check out this link...

http://icbseverywhere.com/blog/resources/tam9education-workshop/

 The Skeptical Teacher – My personal musings on science, education and skepticism in an age of woo...

http://skepticalteacher.org