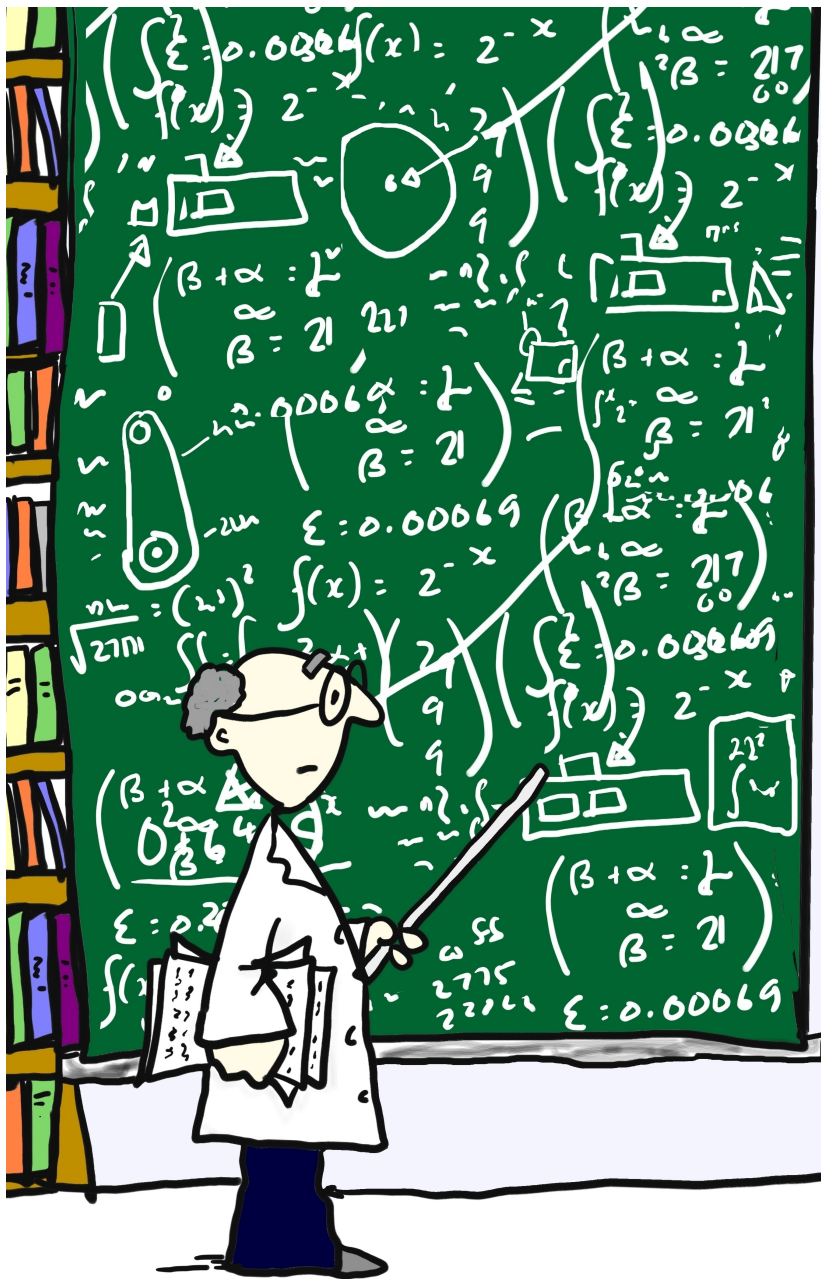


Science Communication

NUH-UH. SOME GUY
ON TWITTER JUST
SAID YOU'RE WRONG.



Tell a story

We have been telling stories for more than 40,000 years because they are...

- easier to comprehend,
- more engaging,
- easier to remember,
- more persuasive.



Logical (scientific) communication

- provide **abstract truths** that that can be generalized to a specific case
- is **context-free** in that it deals with the understanding of facts that retain their meaning independent from other information.

Narrative communication

- provides a **specific case** from which an individual can generalize to infer general truths
- is **context-dependent** because it derives its meaning from the ongoing cause-and-effect structure of the temporal events of which it is comprised

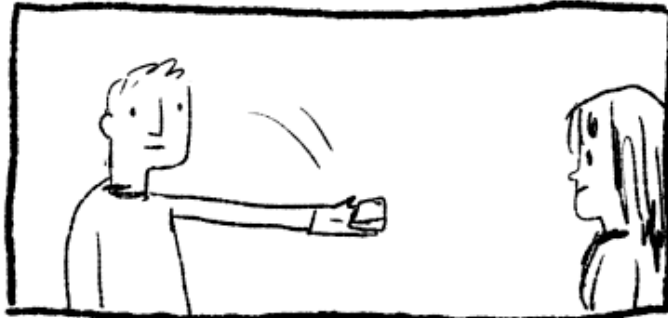
A story illustrates...

- *The Problem*
- *Its significance*
- *The solution(s)*
- *The benefits*

Telling stories and distilling your message takes practice!

<https://padlet.com/silke67/w4dzc4ny91ednuur>

some kind of wood



Rules for scientific storytelling to scientists:

Reproducible

Predictive

Prospects for improvement

Rules for scientific storytelling to the public:

Passion

Context

Needs

Rethink

“I need to tell something to my audience”

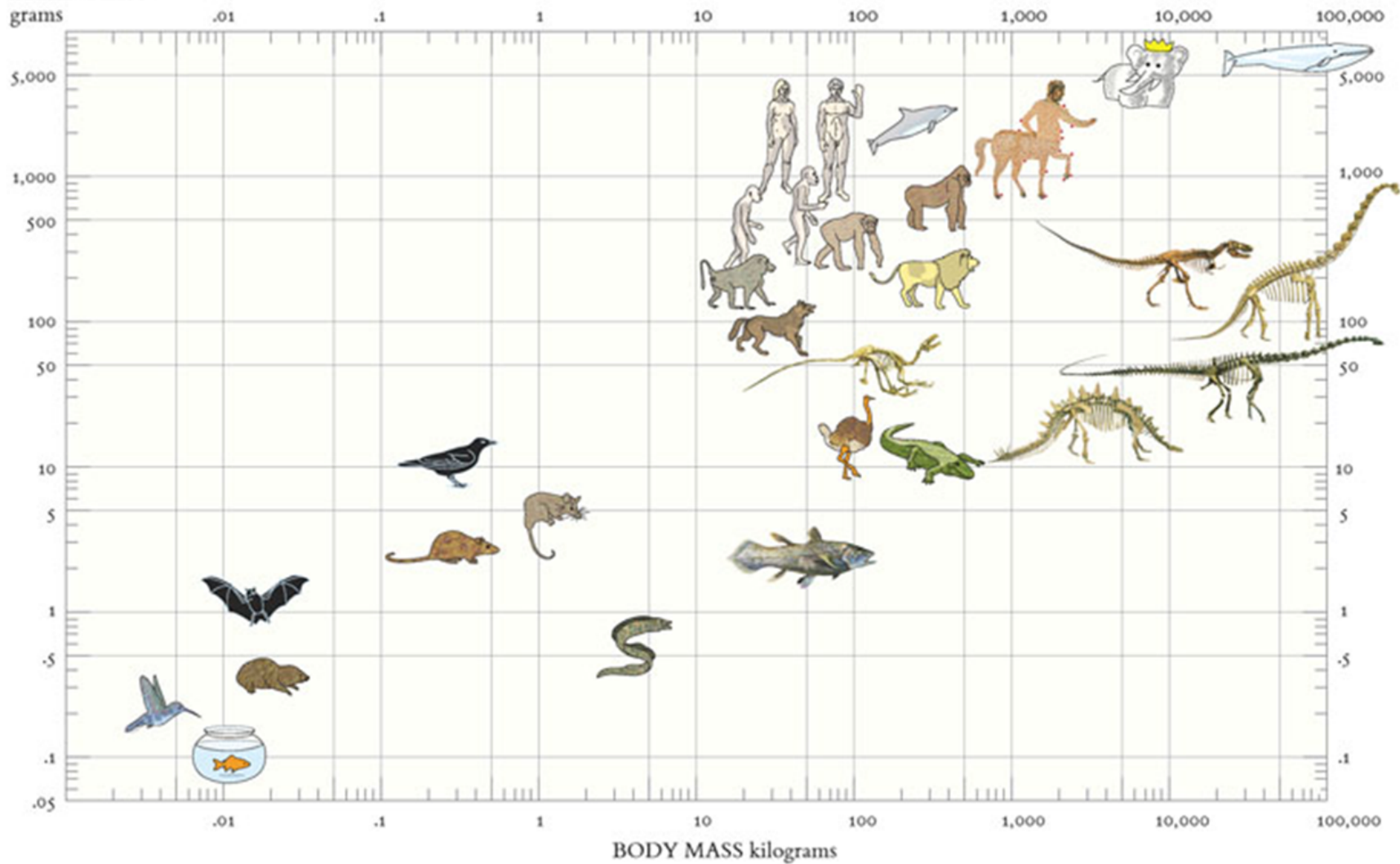
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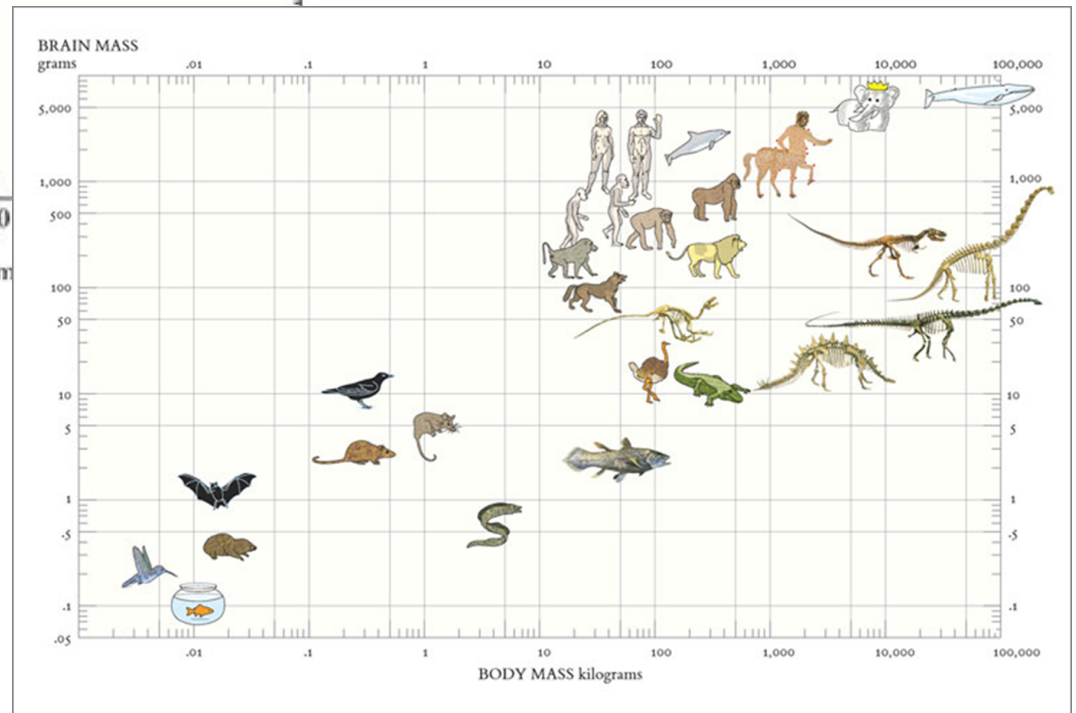
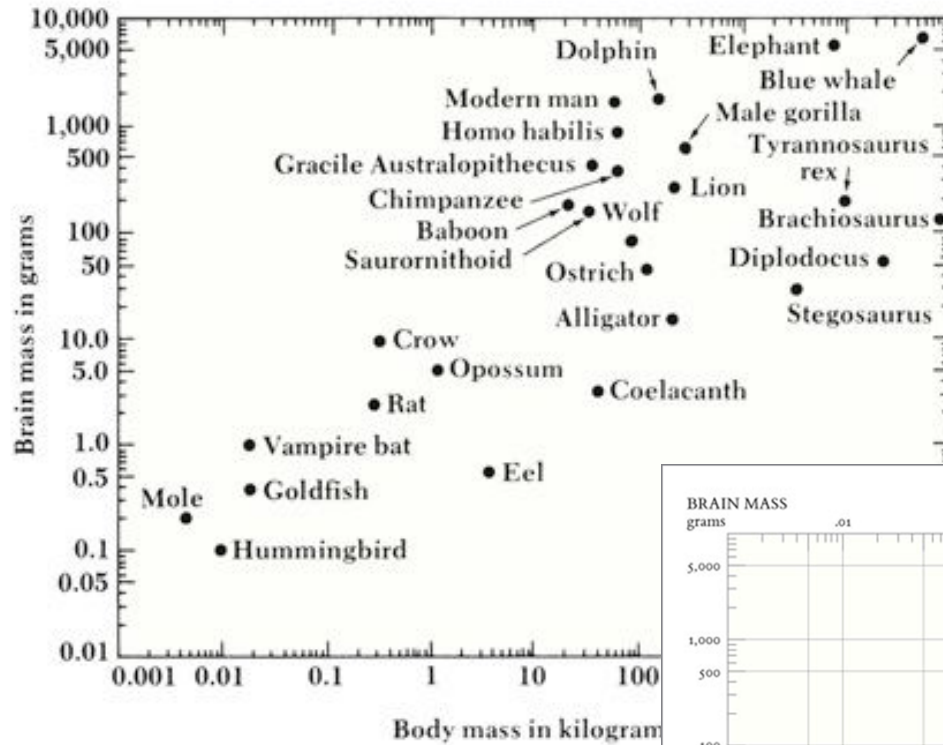
“I have something I want to share”

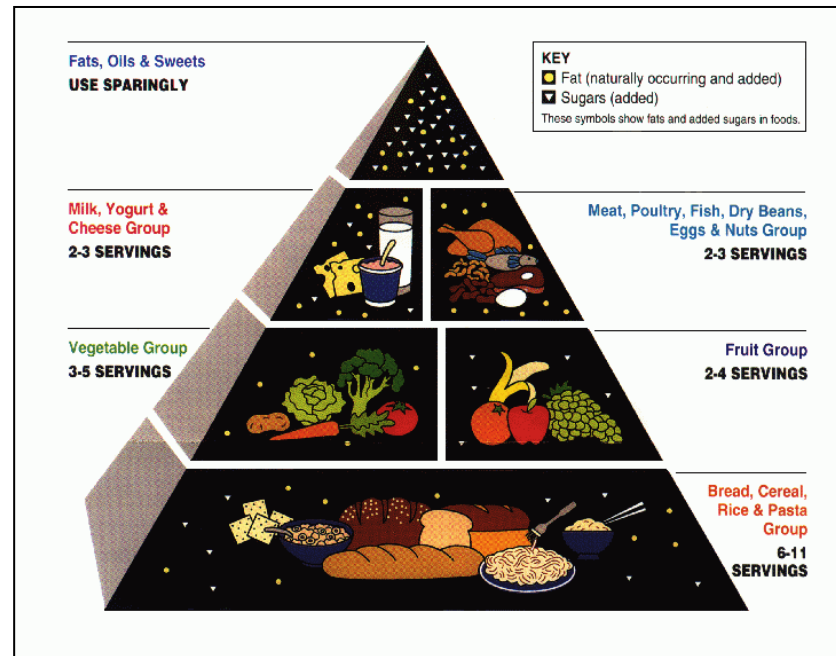
*“If the story is not about the hearer, he will
not listen”*

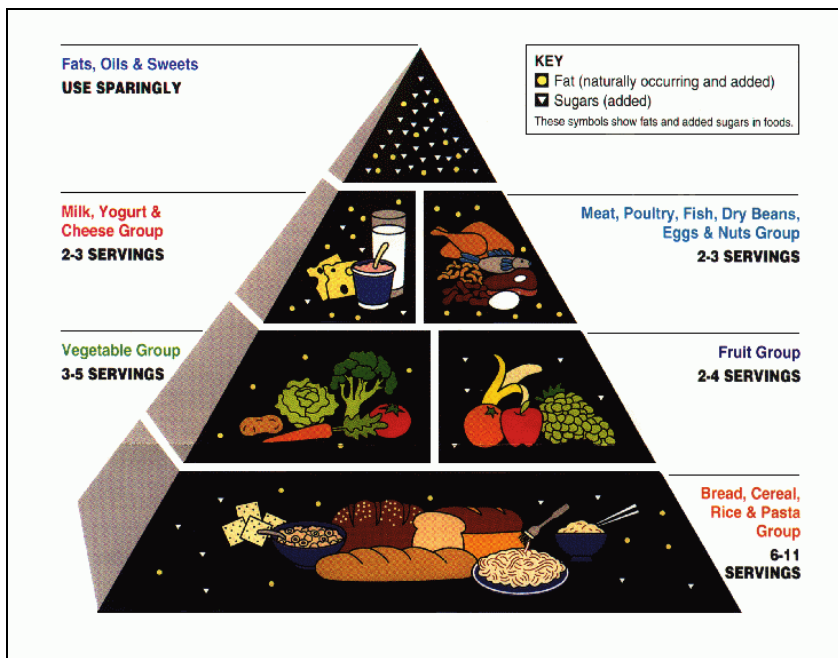
(John Steinbeck).

BRAIN MASS







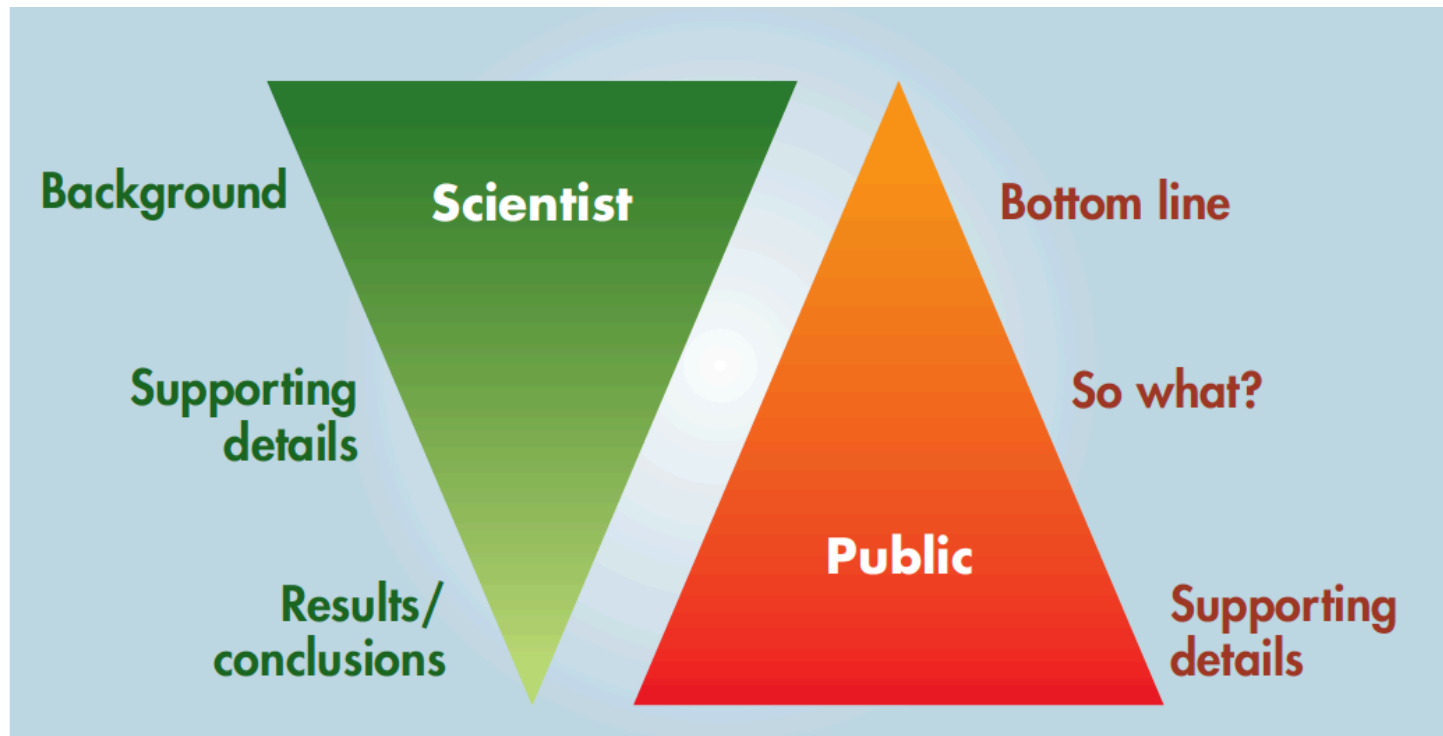


A simple framework for story telling

- *AND* (used to connect ideas)
- *BUT* (the question or the problem)
- *THEREFORE / SO* (the solution)

[This is true and observable] **and** [this is true and observable OR this data exists], **but** [problem statement], **therefore** [this is how we are addressing the problem].

Science Talk Vs Public Communication



Terms that have different meanings for scientists and the public

Scientific term	Public meaning	Better choice
enhance	improve	intensify, increase
aerosol	spray can	tiny atmospheric particle
positive trend	good trend	upward trend
positive feedback	good response, praise	vicious cycle, self-reinforcing cycle
theory	hunch, speculation	scientific understanding
uncertainty	ignorance	range
error	mistake, wrong, incorrect	difference from exact true number
bias	distortion, political motive	offset from an observation
sign	indication, astrological sign	plus or minus sign
values	ethics, monetary value	numbers, quantity
manipulation	illicit tampering	scientific data processing
scheme	devious plot	systematic plan
anomaly	abnormal occurrence	change from long-term average

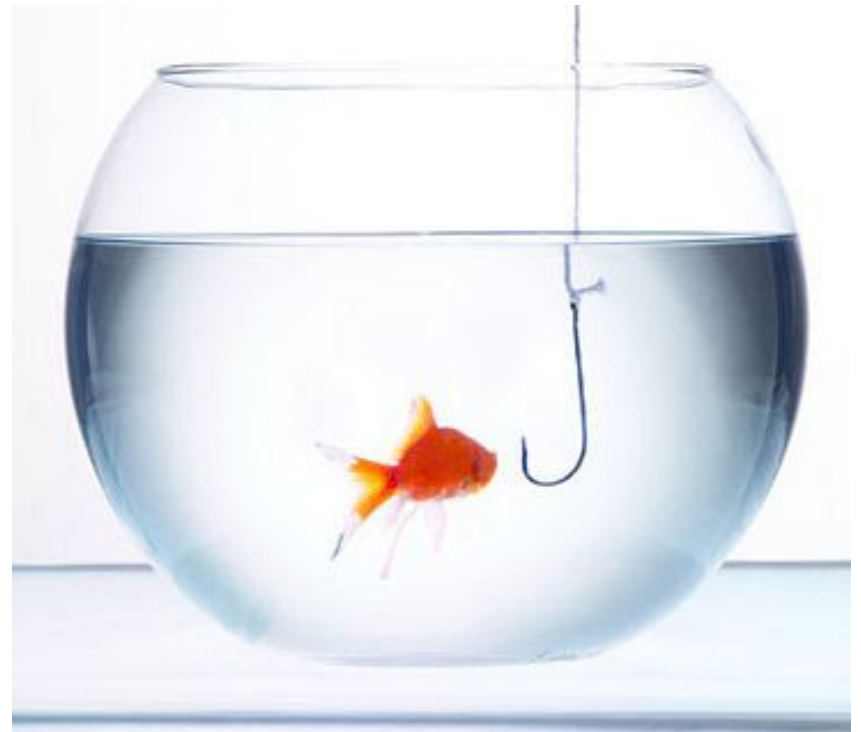
Consider your audience

How would you answer the question “What do you do?” to these different audiences?

- *High school students*
- *Elementary school students*
- *Colleagues from a different field*
- *Local politicians*
- *Science skeptics*
- *Retirement home*
- *Advertising agent*

Find a hook

A one-liner helps to package the information to grab attention. Be creative!



Feds Hide Why Shrimp On A Treadmill Cost \$1.3M

In [Gov't Incompetence, Science & Skepticism](#)

January 18, 2016

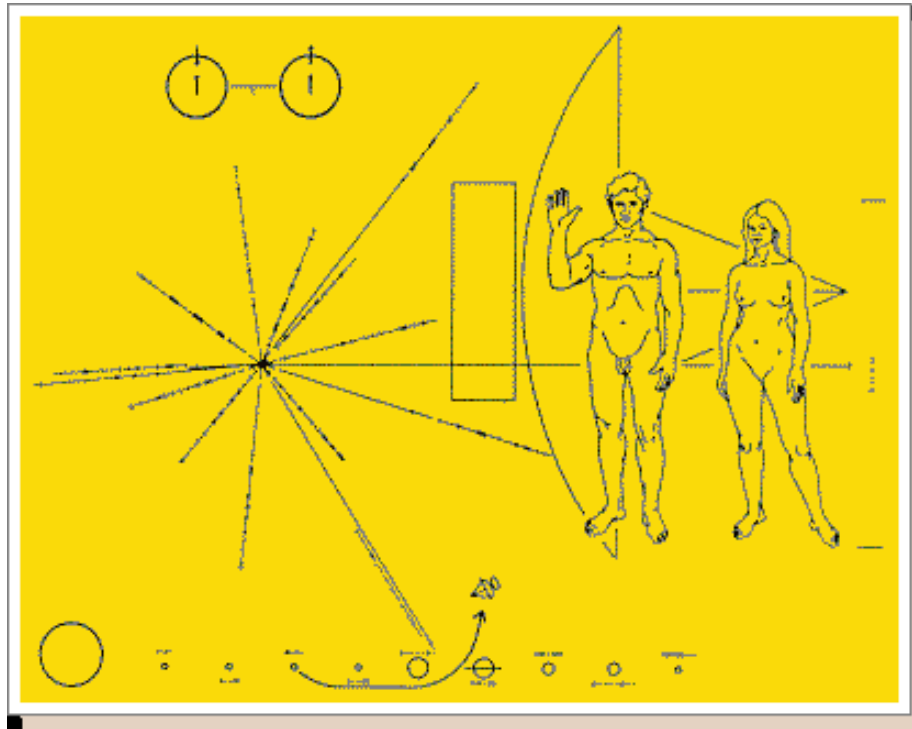
[Guest Post](#)

1060 Views

0 comments



The Ultimate Elevator Pitch



Metal plaque carried by NASA Pioneers 10 and 11 spaceships (1972 and 1973)