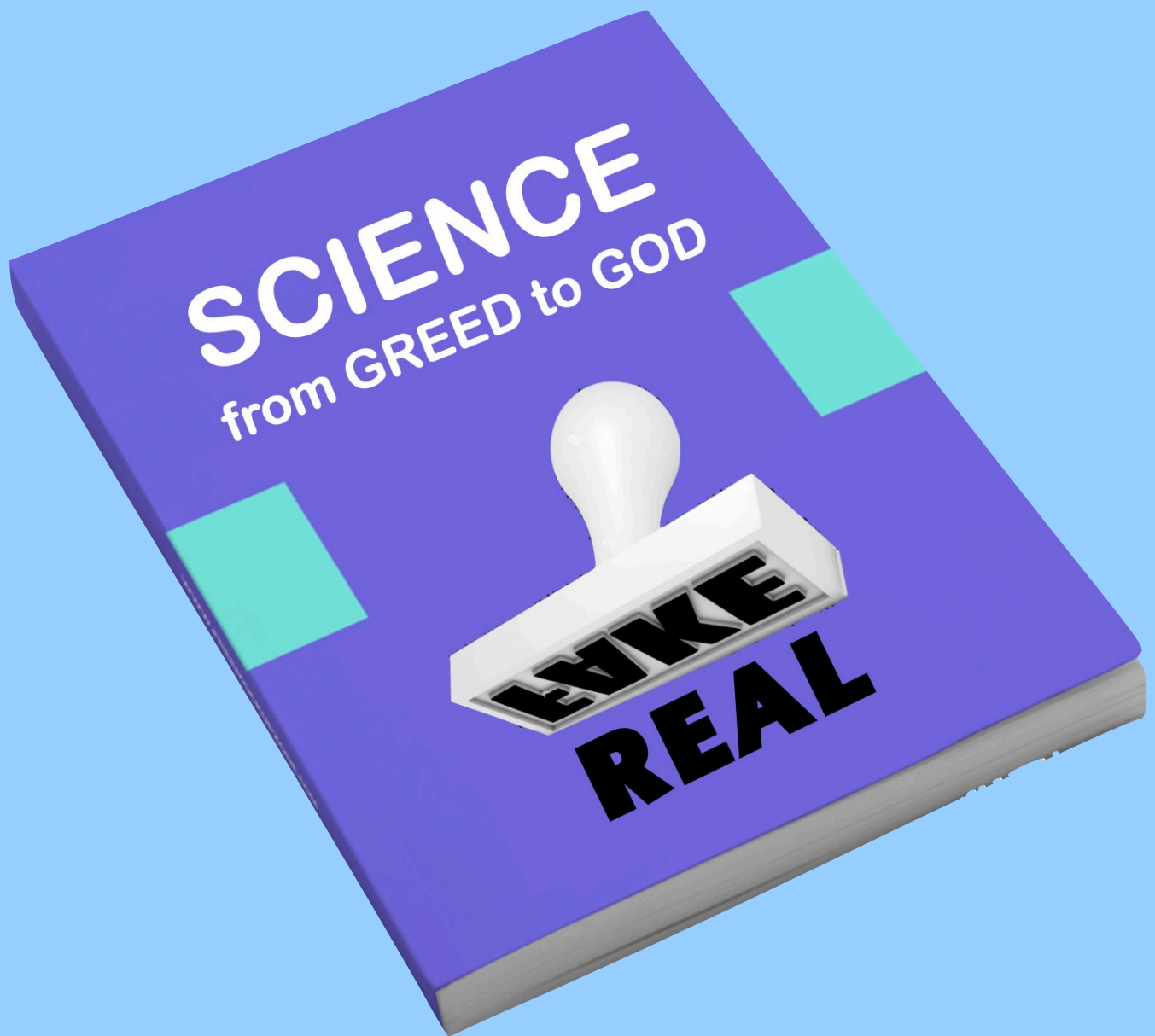


A Book Like No Other:
What Science Is and Is Not



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hat's desperately needed is an interesting and easy-to-read book explaining what Science is, and is not. Amazingly, nothing like that has ever been published! If done right, it would unequivocally be a best seller.

Why? Because our society is awash with complex, technical issues that require informed minds to address – climate, energy, health care, etc. How we deal with these issues will have a profound and lasting impact on our lives and on the lives of future generations, and indeed the success of the American Experiment.

Pressure to conform, to follow consensus, to default to “experts,” to ignore inconvenient facts, etc., has never been greater. Understanding what Science is, and is not, so that we can resist the extraction of our freedoms, is the existential issue of our time.

This is a brief summary of the situation we are in:

- a) The worst current problem in US K-12 schools (*by far*), is WHAT our children are being taught – i.e., what is in (or missing from) the **curriculum**.
- b) The part of the curriculum that has been most extensively corrupted, is the subject area of **Science**. This is due to 49± states fully (or mostly) adopting the progressive *Next Generation Science Standards* ([NGSS](#)), which is a frontal assault on traditional Science (e.g., they quietly extracted the Scientific Method, and are subverting Critical Thinking. See this [Report](#) for details.)
- c) Our country is experiencing attacks on multiple fronts, but this is arguably the most significant. Every year this results in over **3 million** propagandized high school graduates, who shortly become **voting citizens**. *This is unsustainable!*
- d) The media is complicit with this campaign, as young and old are continually bombarded with one-sided and inaccurate claims.
- e) Parents are the last line of defense against this corruption – and this book gives them the perspective and ammunition they need to protect their families.

Two possible titles for this desperately needed book are: **Science: from Greed to God**, or **Science: The Insider's Handbook** – *but creative alternatives are welcome!*

Science is now an **essential element of our existence**, so **everyone** needs to know some in-depth Science basics. However, due to the proliferation of the NGSS in US K-12 schools, almost all of the examples below are **superficially treated, mistreated, or ignored**. It's not materially any different in higher education – but the die is set in K-12.

Adults are likewise subjected to a slew of non-Science nonsense from government agencies, powerful organizations promoting self-serving policies, the media, etc., etc. Here is a unique list of how to separate the wheat from unscientific chaff, in a suggested chronological order of topics to cover:

1. Critical Thinking (*Properly [defining](#) and understanding it. This includes appreciating the numerous, profound [benefits](#) of being a critical thinker.*)
2. Linear vs Lateral thinking (*there are significant merits for both: [here](#), [here](#), and [here](#)*)
3. Social Emotional Learning (*how [Critical Thinking can achieve SEL objectives](#)*)
4. How and why is [Science under assault](#)? (*Science is a gatekeeper against unscientific technical policies, Science is respected so it is claimed to be the basis of cons, etc.*)
5. Definition of Science ([Science is a Process](#))
6. History of the [Scientific Method](#) (*4000± years of a successful process*)
7. The four key elements of a [Scientific Assessment](#) (*Objective, Comprehensive, Empirical, and Transparent*)
8. [Hypothesis vs Theory](#) (*explaining the different levels of Scientific certainty*)
9. Scientific responsibility (*Is it the proponent's obligation to prove their claim, or is it the obligation of skeptics to disprove it? See [here](#) and [here](#).*)
10. Science and Public Relations (*Is being right enough to win the day? See [here](#).*)
11. Science and Public Policy (*How should the two relate? See [here](#).*)
12. [Real Science vs political science](#) (*not even remotely similar*)
13. Consensus (*not a Scientific procedure, but rather a political aspiration, see [here](#) & [here](#)*)
14. [Peer Review](#) (*a good idea that has been co-opted*)
15. [Statistics](#) (*the good, bad, and the ugly of probabilities, LNT, etc.*)
16. [Data](#) (*there's data and then there's [data](#)*)
17. [Correlation vs Causality](#) (*What is the relationship between the two?*)
18. Computer Models and projections (*benefits and [substantial weaknesses](#)*)
19. [Science vs Scientists](#) (*Are studies by scientists, Scientific?*)
20. Scientists and [Relativism](#) (*Does the end objective justify the means?*)
21. Science and Equity (*a discussion of the Equity Chapter in the [Framework](#)*)
22. [Post-Normal Science](#) (*Are some technical issues beyond the ability of Science to assess?*)
23. [Normative Science](#) (*agenda-driven scientists rarely produce real Science*)
24. [Technical terminology](#) (*conveying hidden messages with carefully chosen words*)
25. [The Precautionary Principle](#) (*Is this scientific or ideological?*)
26. [Intuition vs Science](#) (*making assumptions can easily lead to unscientific conclusions*)
27. Scientists vs Engineers (*how they differ in objectives, methodology: [here](#) and [here](#)*)
28. Science and the Media (*journalism vs advocacy: see [here](#) and [here](#)*)
29. Artificial Intelligence (*our best friend and our worst enemy: see [here](#) and [here](#)*)
30. Science and Religion (*Can Science prove, or disprove, the existence of God? See [here](#).*)

After carefully reading this book, ANYONE would be better prepared to encounter a Science (and pseudo-science) world, even if they never had any Science classes. Likewise, for those who have taken Science classes in K-12 and/or higher education, it would be an invaluable supplement and reference.

FYI, I have a graduate degree in Physics (and back when schools were much less compromised), and I don't recall hardly *any* of these topics being discussed...

Similarly, during my 40+ years as a professional scientist, I've easily dealt with well over a thousand scientists, from multiple fields. My distinct impression is that the majority of them would **not** be fluent regarding many of these issues!

What this all means is that this powerful book will provide an advanced class about Science, by using interesting, everyday issues to convey a critically important message.

And there's more! With relatively minor modifications, such a book could be converted into a high school or college freshman textbook (e.g., for a class like [Real Science 101](#)).

In addition to the benefits already identified, after taking such a class:

- a) ALL students would perform better on state and national Science tests.
- b) Because (if done right) this would likely be perceived to be the most interesting high school course offered (*in all subject areas*), a higher percentage of students would become STEM-interested.
- c) STEM students would be MUCH better prepared to subsequently take traditional Science classes in high school and college.

Considering the two very different markets such a book would fall into, the financial return for such an endeavor could be unprecedented...

PS – The indicated references for the above thirty items, are *examples*. I'm open to any suggestions for better references, so please advise if you have any superior ones.

PPS – Some miscellaneous interesting Science References that might be included:

[The Feynman Lectures on Physics](#) by Richard P. Feynman, et. al.

[Where is Science Going?](#) by Max Planck

[A Short History of Nearly Everything](#) by Bill Bryson

[The Emperor of All Maladies](#) by Siddhartha Mukherjee

[Critical Mass](#) by Philip Ball