

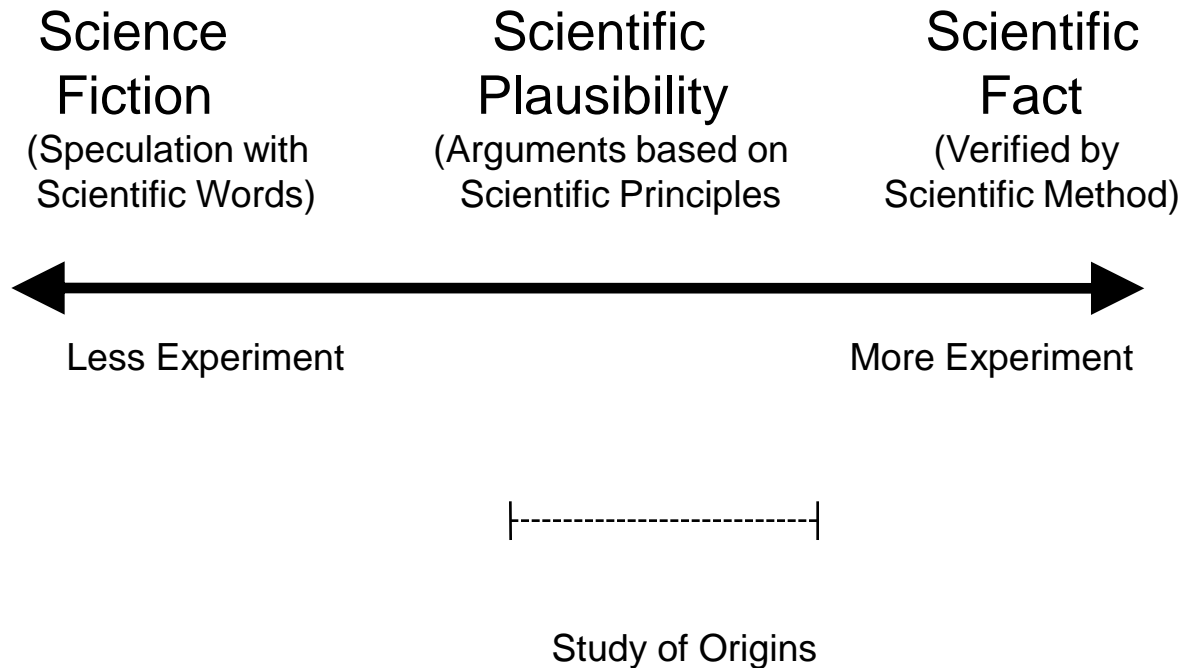
“I Prefer Experimental Science !”

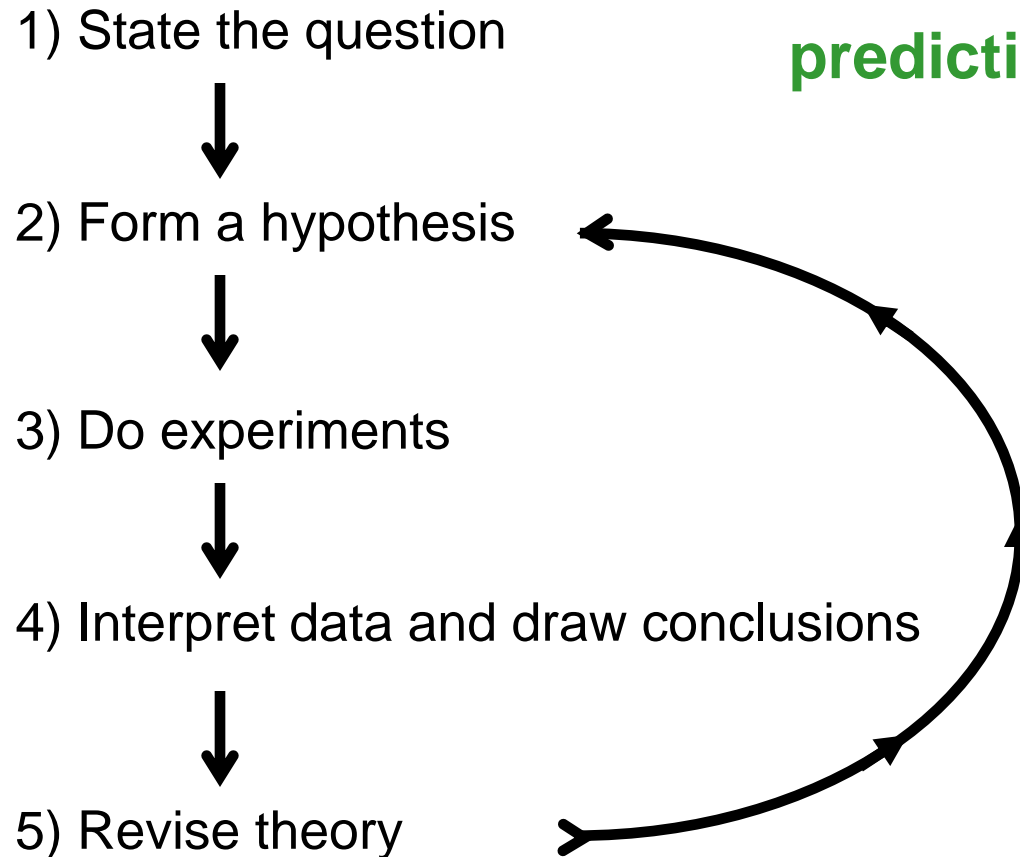
Gerald Lenner, Ph.D.
November 14, 2008

Talk Outline

- Experiment, the essence of science (Scientific Method)
- Is the theory evolution verified by experiment ?
 - Origin of life ?
 - Organic evolution and fossils ?
 - “Parallel structure” enigma ?
- Conclusions and good things

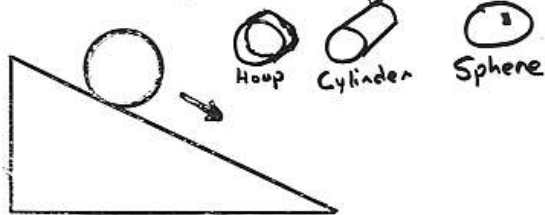
How Confident Are We of About Our Origins ?



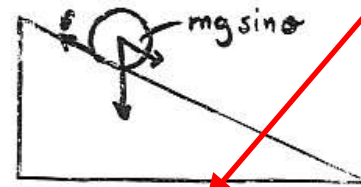


Good theories are **predictive** and **falsifiable**

Question: On a slope, which object undergoes the greatest acceleration?



Theory - true ?



$$L = I\alpha$$

where $I = \int r^2 dm$

$$\bar{L} = \bar{r} \times \bar{f} \Rightarrow f = \frac{I\alpha}{r}$$

$$F = ma$$

$$-\frac{I\alpha}{r} + mg \sin \theta = ma$$

$$a \left(\frac{I}{r^2} + m \right) = mg \sin \theta$$

Hypothesis 1 - The hoop.

It's lighter, so it can start rolling easier so it gets a head start.

Hypothesis 2 - The same for all.

Just as objects fall with equal acceleration, rolling objects do the same.

Hypothesis 3 - The sphere.

Mass is near axis of rotation, so less energy is spent on rotation, allowing faster motion.

$$I_{\text{cylinder}} = \frac{mr^2}{2} \Rightarrow a = \frac{2}{3} g \sin \theta$$

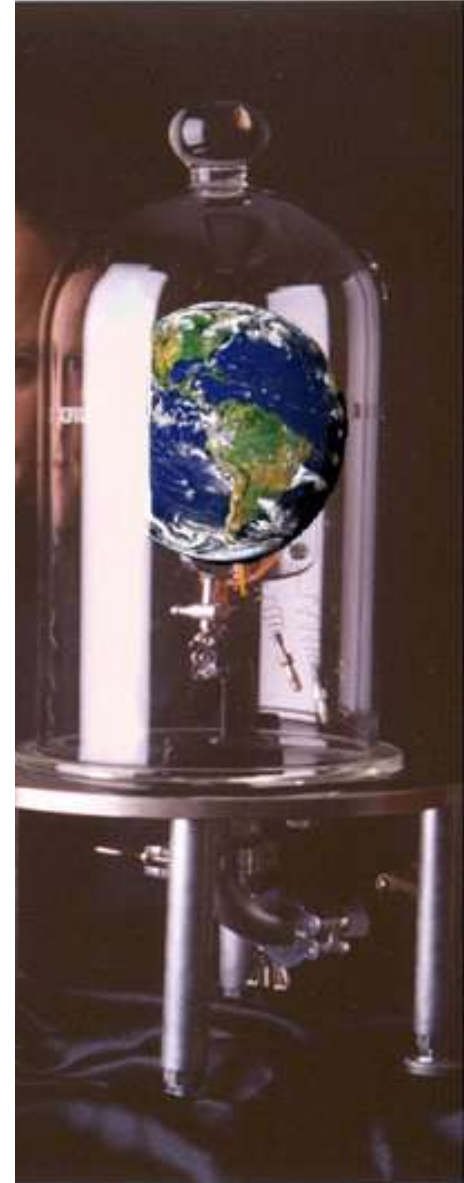
$$I_{\text{sphere}} = \frac{2}{5} mr^2 \Rightarrow a = \frac{5}{7} g \sin \theta \text{ fastest}$$

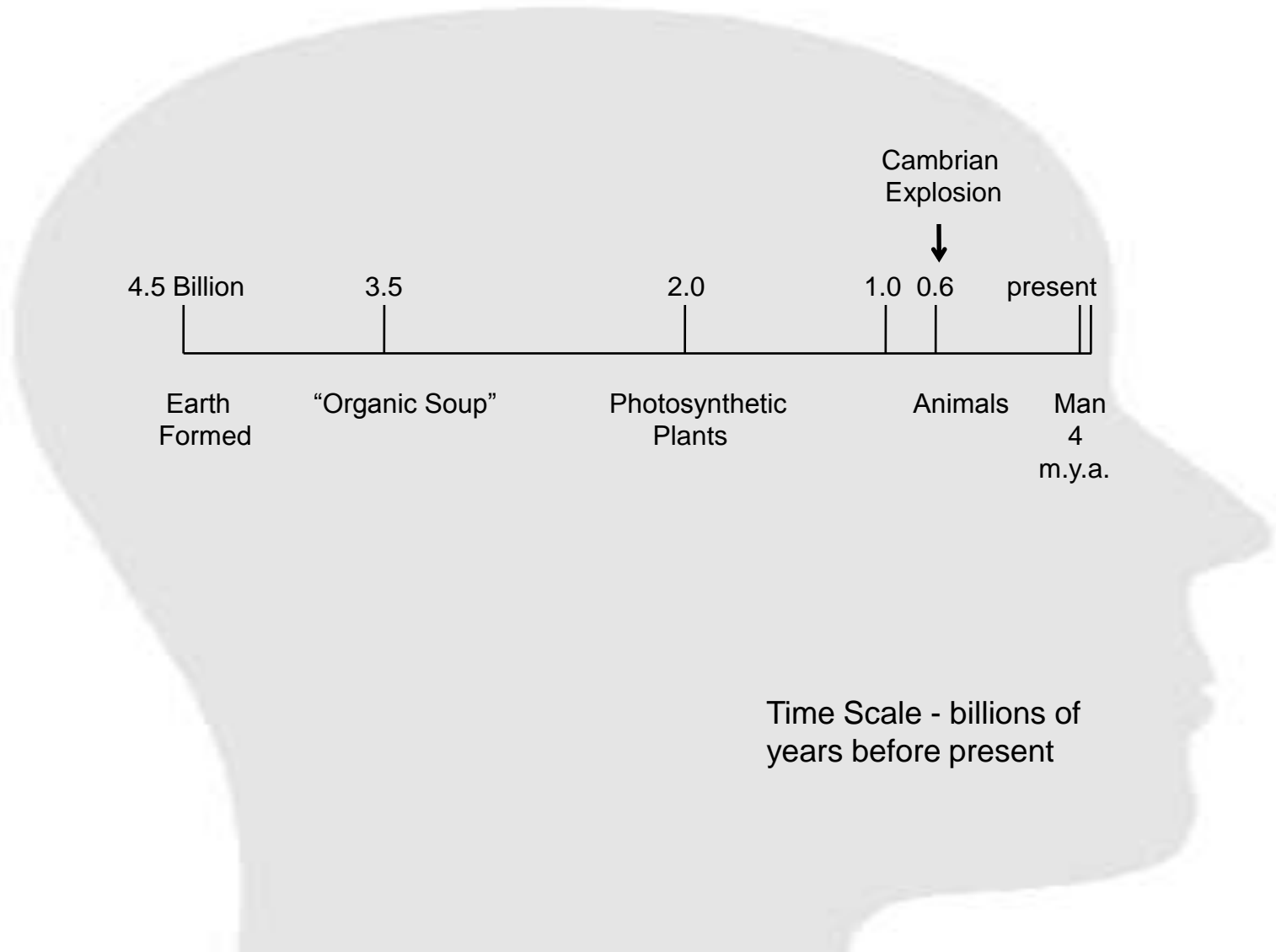
$$I_{\text{hoop}} = mr^2 \Rightarrow a = \frac{1}{2} g \sin \theta$$

The sphere is fastest - try this at home

Notice how the theory, $F = ma$, is predictive and subject to falsification. 5

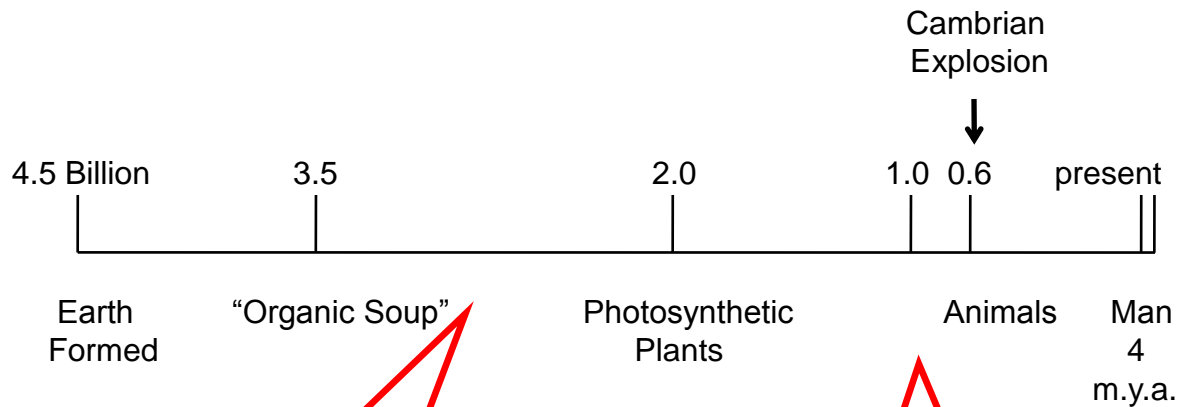
Can we replicate the history of the earth in the lab ?





Time Scale - billions of years before present

Experimental Proof ??



How did life begin ?

How did life evolve ?

Popular Ideas Regarding the Origin of Life

Where did life start ?

- Charles Darwin's "warm little pond"
- Undersea hydrothermal vents
- Ocean foam

Where did the building blocks come from ?

- The early atmosphere
- Comets, asteroids, and meteorites

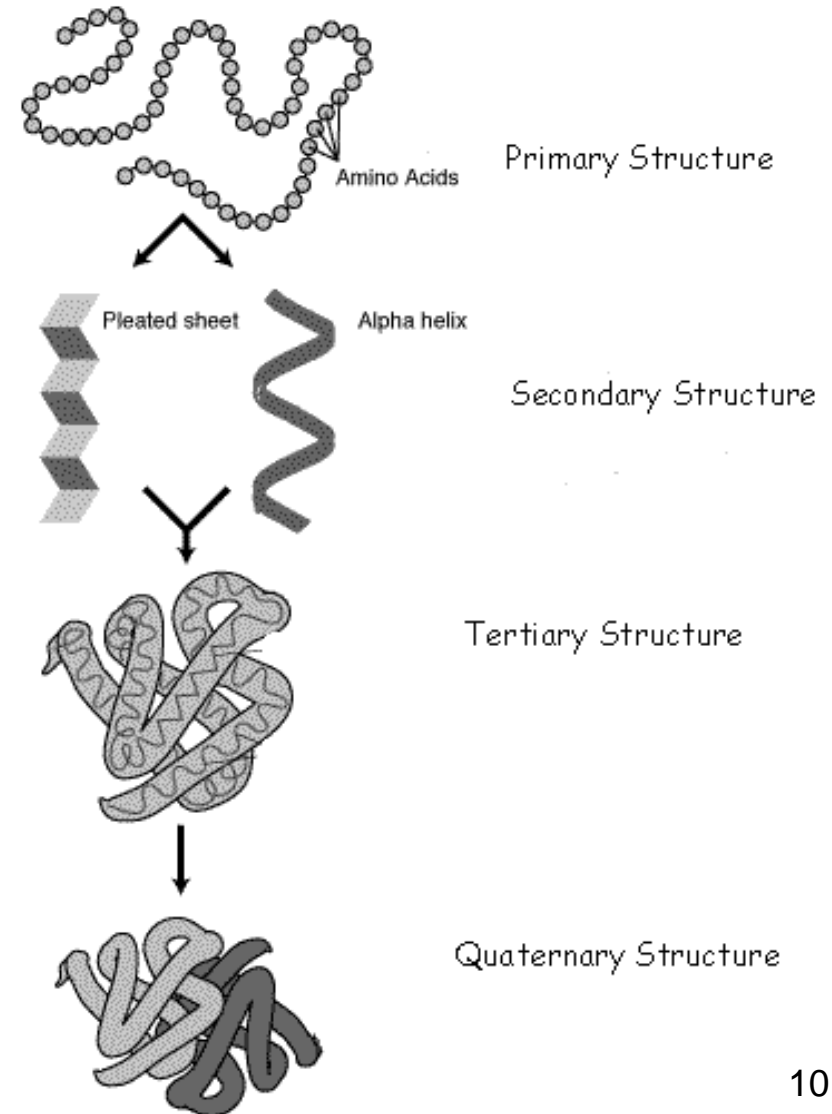
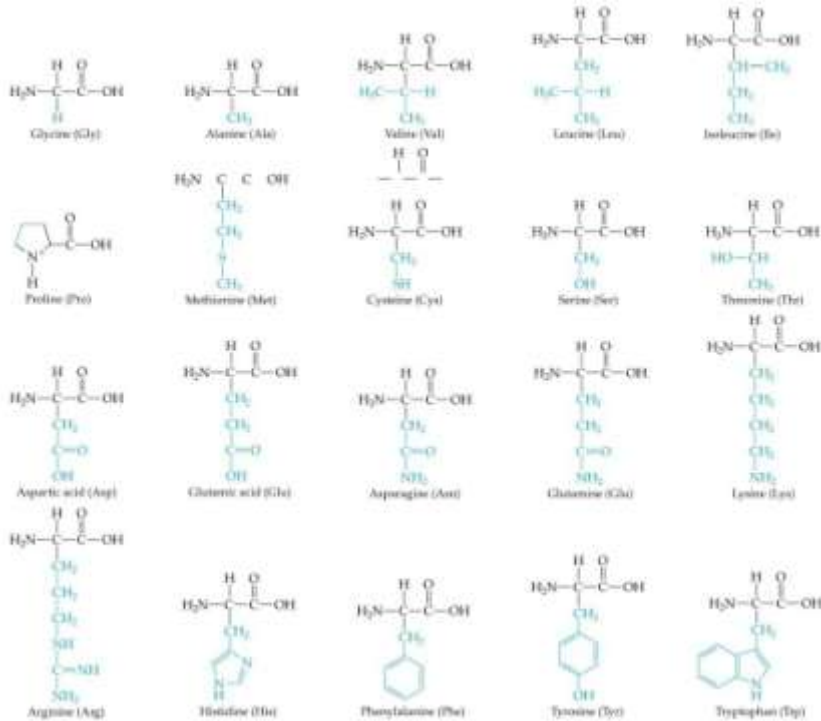
How did life start ?

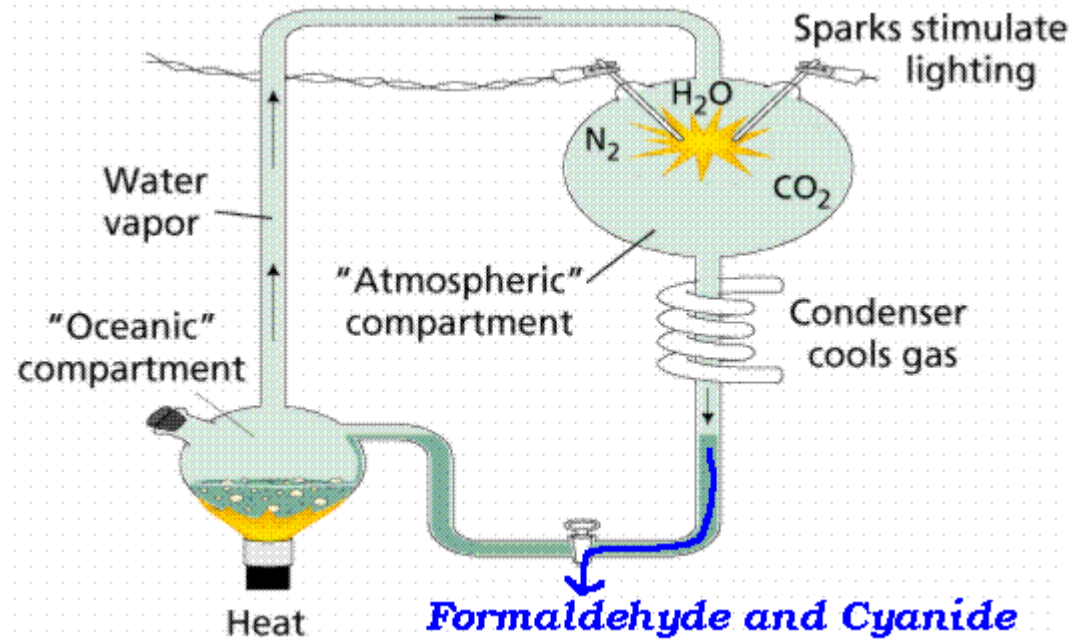
- Soup theory - "RNA first" and "Protein first"
- Crystalline clay substrates
- Pyrite (fool's gold)
- Self-organization

How about creation ... ?

Protein Structure Assembly

Amino Acids (20)





How probable is the spontaneous formation of life ?

Odds of a given (a priori) n length protein to be spontaneously formed goes as $(1/20)^n$, for example $P_{100} = 10^{130} : 1$



What are the chances of life spontaneous forming on earth ? According to Hoyle and Wickramasinghe, $10^{40,000}$ to 1. About as likely as a tornado going through a junkyard and assembling a Boeing 747 !

C. S. Lewis, *The Problem of Pain*

Not many yeas ago when I was an atheist, if anyone had asked me, "Why do you not believe In God?" my reply would have run something like this: "Look at the universe ...

years Not would many "Why ago when anyone Look an atheist, if universe ... asked had me, do not believe In reply would have run you something I was my like this: "at the God?"

oears Not woeld many "Whes agu wten anyone Loek an atheist, yf univqrse ... asked had se, do not bwlieve In reptly wokld hyve run yoa somwthing I uas mi tike this, "rt tte God?"

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ms&k Eas EJ W Eism tjMe,Shji fyHDSolk #R trcVjh)sS yskS dFGuYj oo iJkg FDR KYoy F djRH oJBN p;.ERe ipBsT ugjj RCVB

Book

Organism

Paragraph

Cell

Sentence

DNA

Word

Protein

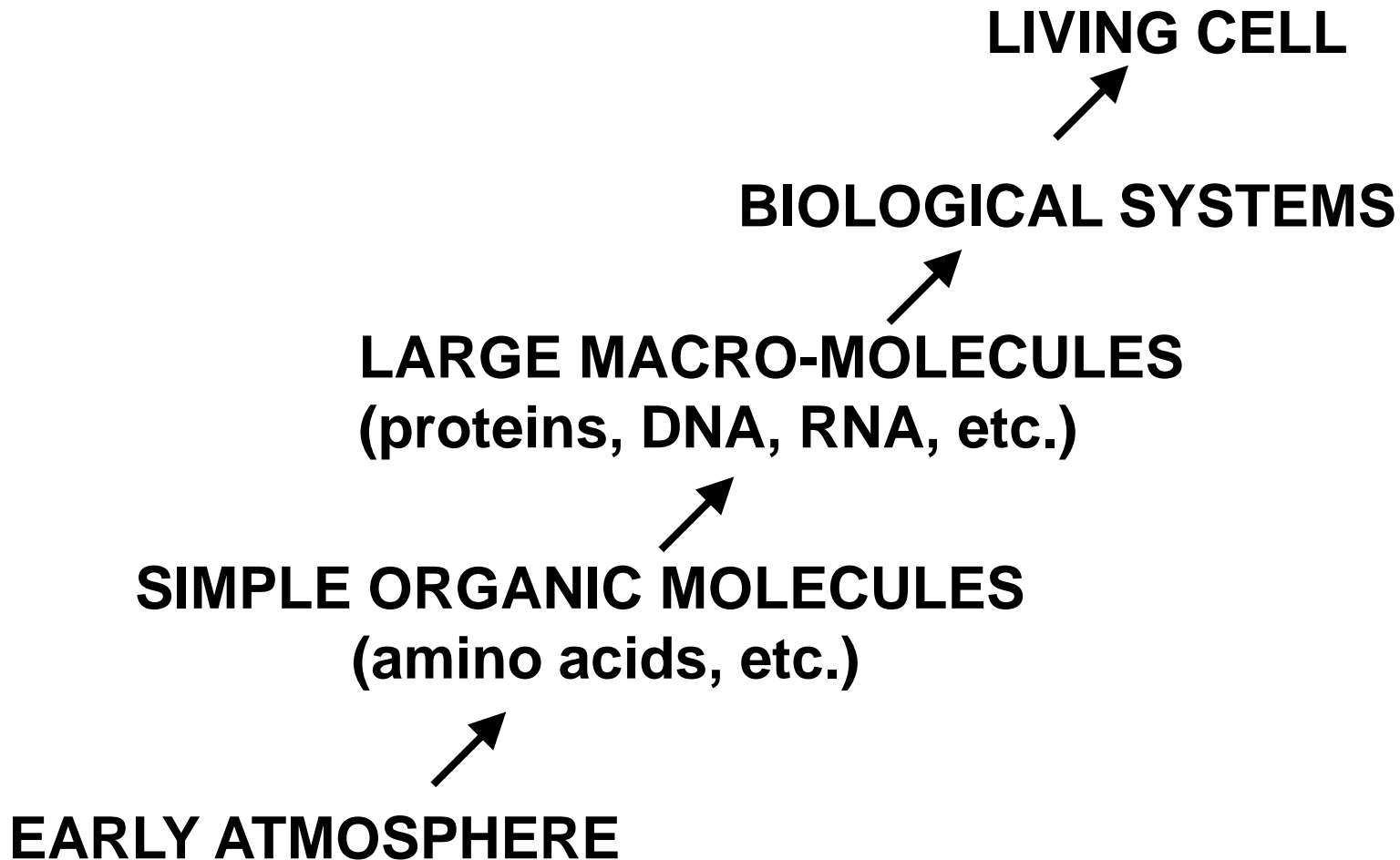
**Letter
(Case correct)**

**Amino Acid
L - only**

Letter

**Amino Acid
Right & Left**

Biological Necessities for Life



Problems with the Evolutionary Origin of Life Details - Part I

EARLY ATMOSPHERE -

- Evolutionists theorize a reducing atmosphere, evidence supports oxidizing atmosphere.
- If oxygen is present, molecules oxidize, if no oxygen, no ozone layer UV from sun breaks molecules down.

SIMPLE ORGANIC MOLECULES -

- Effects of dilution must be overcome.
- Same energy needed for bonds also destroys them.
- Incompatibility - molecular reactions with each other.

Problems with the Evolutionary Origin of Life Details - Part II

LARGE MACRO-MOLECULES (proteins, DNA, RNA, etc.) -

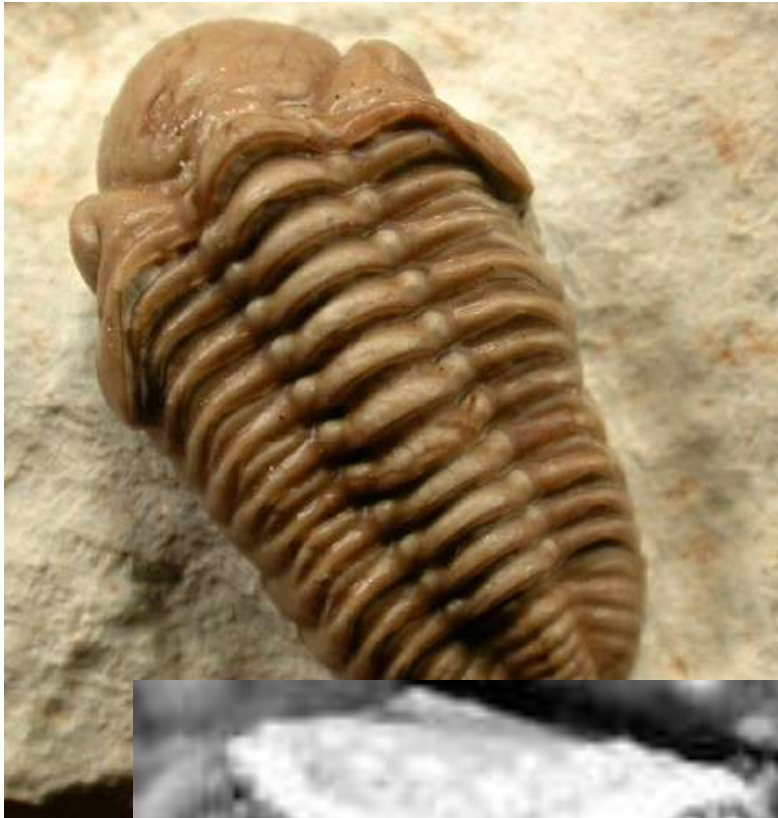
- Chemical interactions.
- Polymerization is not energetically favored.
- How do you get correct sequence of amino acids to form proteins?
- How are only L-amino (left amino acids) selected for life?

BIOLOGICAL SYSTEMS -

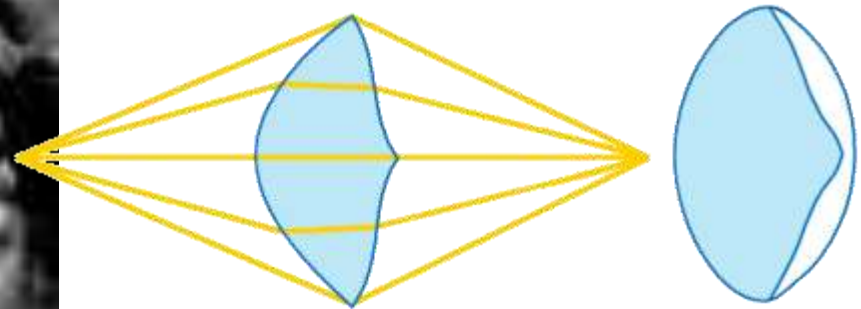
- No spontaneous self-assembly.
- You need DNA to make proteins but you need proteins (to make a the cell structure) to make DNA.

LIVING CELL -

- No “simple” cells are found.
- “Statistical proteins”? Smallest genetic mistake causes devastating effects.



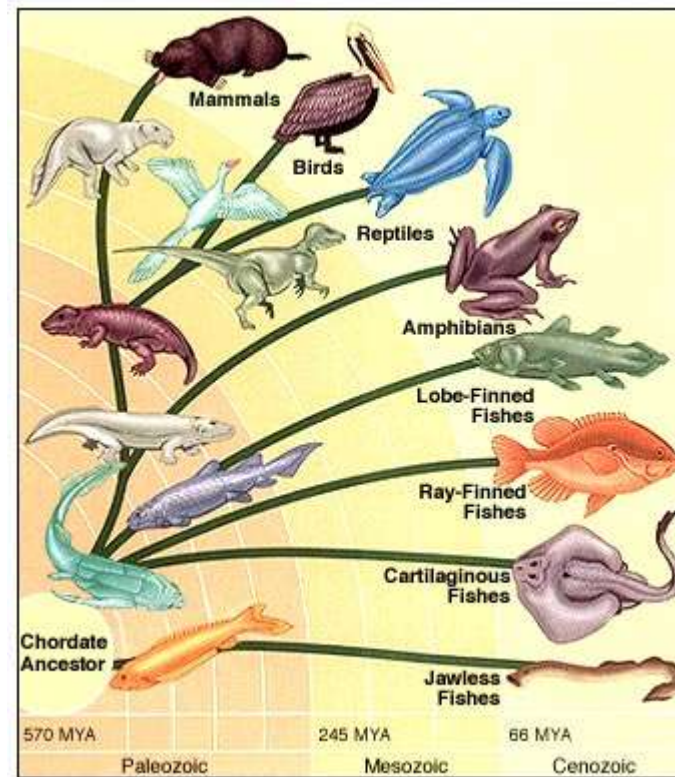
Trilobites



Theoretical Evolution of Man



Theoretical evolutionary flow chart



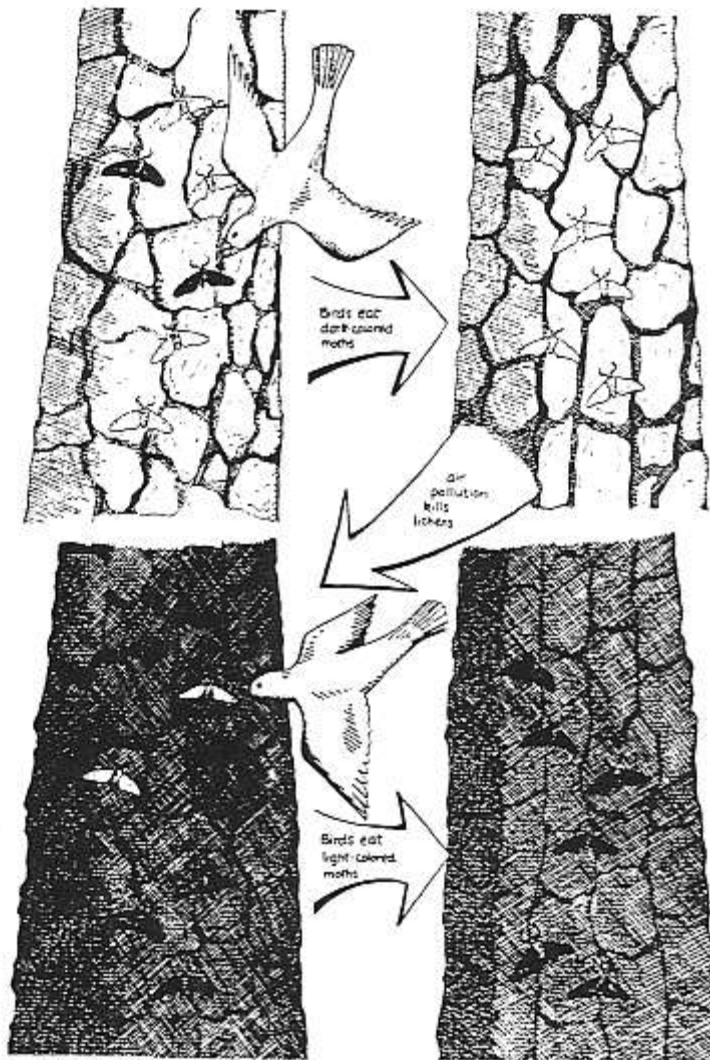
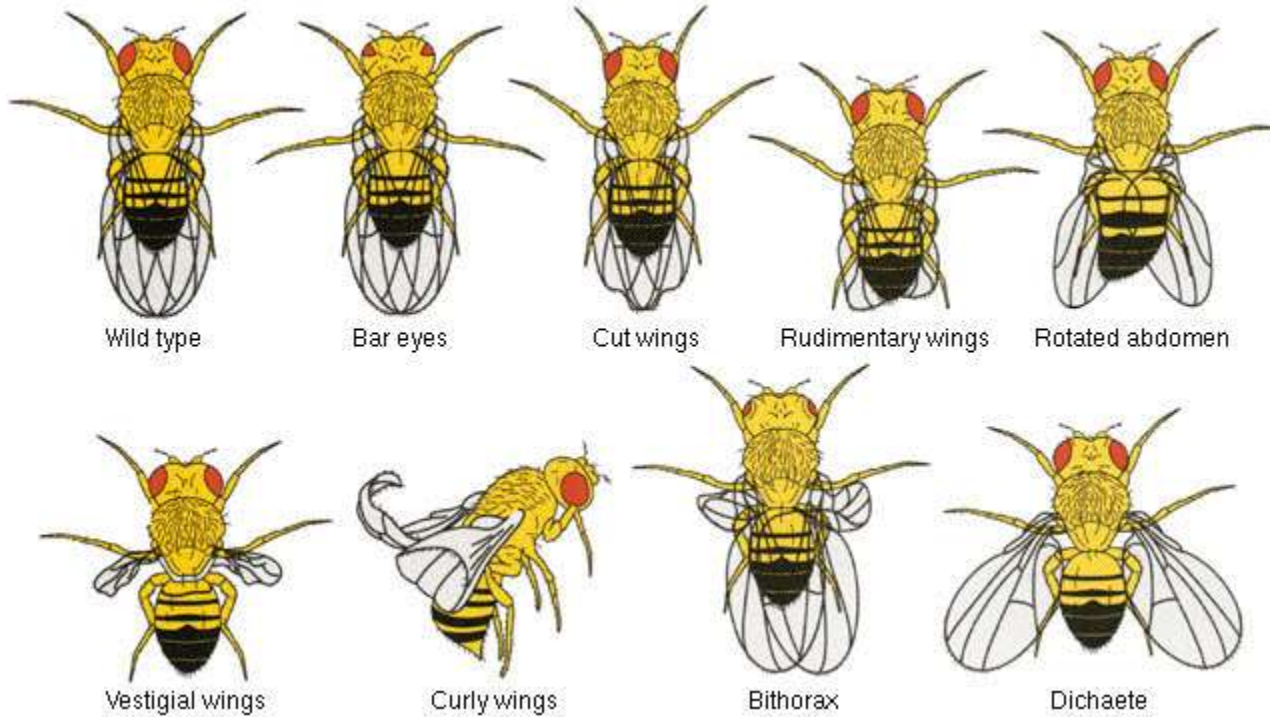


Figure 2.3 Development of industrial melanism in moths.

**Can the
moths
become
blue ?**





Ichthyostega, one of the earliest amphibians from the late Devonian. (from Jarrick)¹⁸

Eusthenopteron (from Gregory and Raven)¹⁹, a representative of the Neopterygia, the group of bony fish thought by some to be the ancestor of the amphibians, also from the late Devonian.^{20, 21}

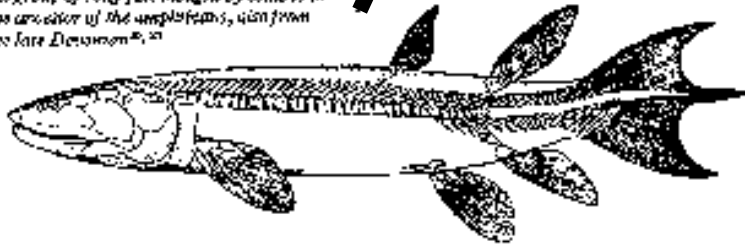


Figure 8.2a: The earliest known amphibian alongside a Neopterygian fish.

Fish to amphibian



The skeleton of the first bat Icaronycteris of the Eocene. (from Jensen)²²



The skeleton (from Gregory)²³ of a modern shrew very similar to the early insectivores thought to be ancestral to the bats.²⁴

Figure 8.2c: The skeleton of the first bat alongside that of a small non-volant mammal.

Bat

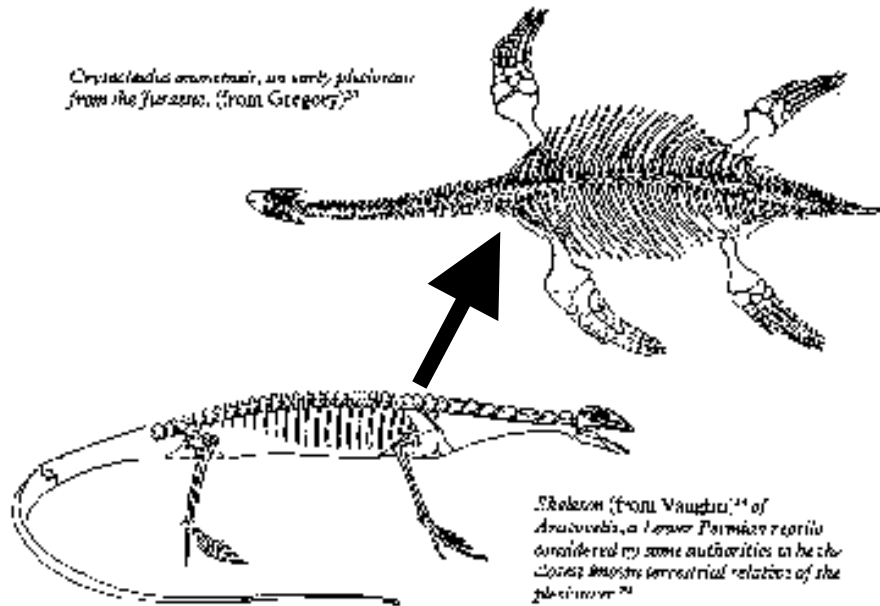


Figure 8.2c: A typical early Plesiosaur and its nearest known terrestrial relative.

Plesiosaur

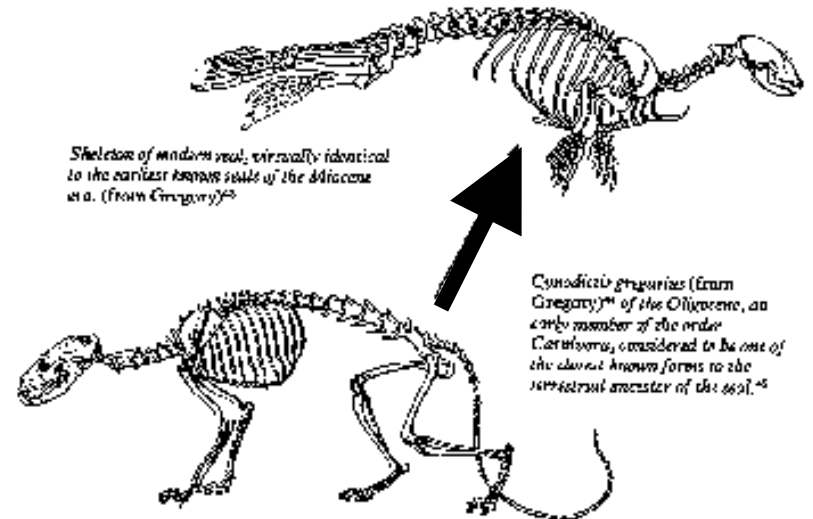
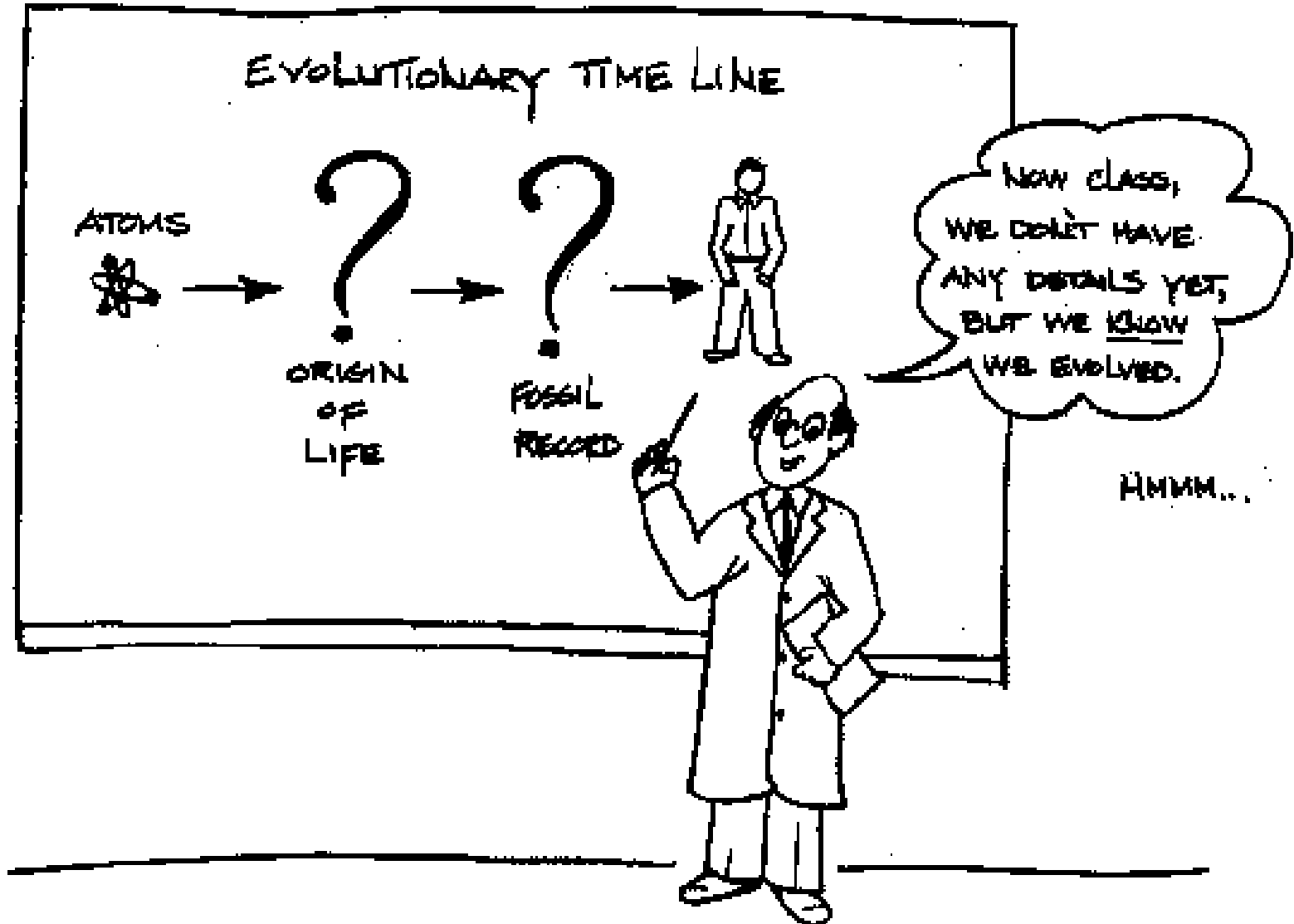


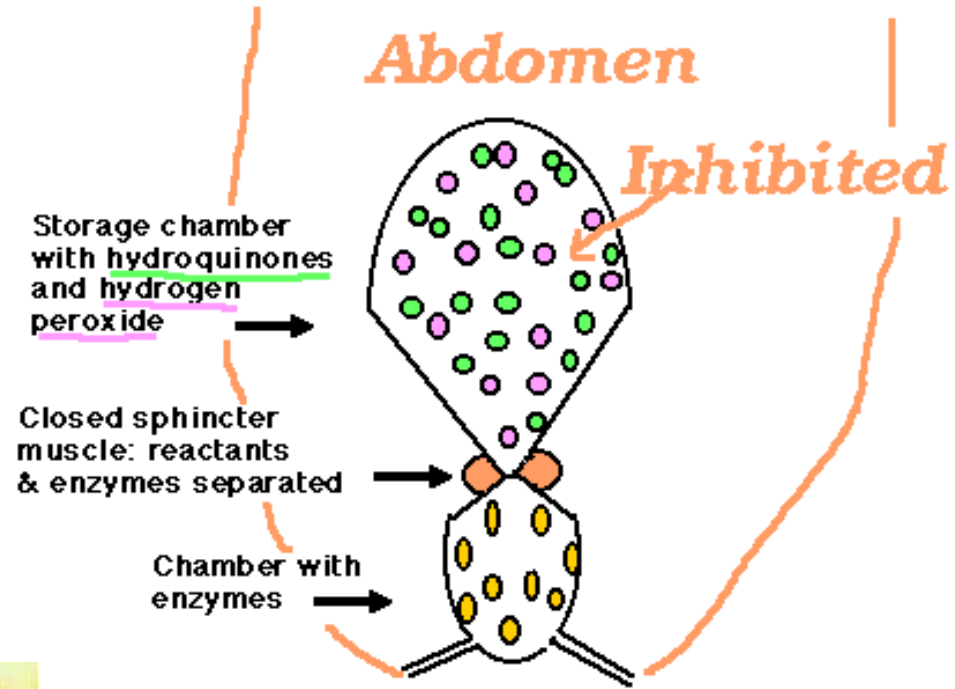
Figure 8.2g: A seal and one of its closest terrestrial relatives.

Seal





Thomas Eisner and Daniel Aneshansley



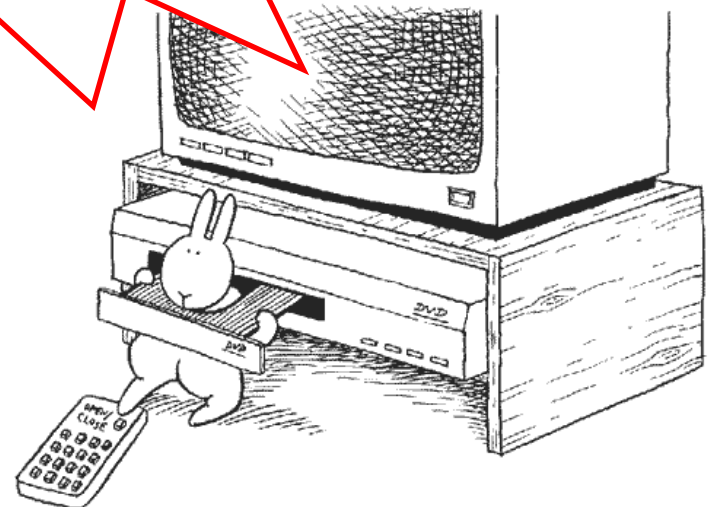
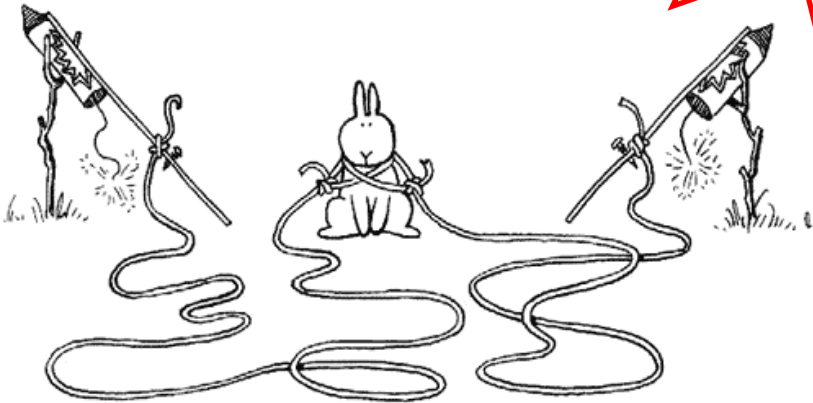
Bombardier Beetle



Simon says;

- Oxygen weighs 16 amu
- $F = ma$
- Genes are stored in DNA
- People evolved...

**People Don't Commit
Intellectual Suicide**



- The *theory* of evolution has severe problems
 - No explanation for the origin of life
 - No support in fossil record
 - No explanation for parallel structure development
- You can believe in an intelligent designer - no conflict with empirical science
- You can place confidence in Genesis
- If God created a very complex world which is tarnished by the fall, God can create another world that is perfect (heaven) just as easy.
- If God built it, he can fix it.