



A Skunk By Any Other Name ...

The Theory of Evolution
Doesn't Jive with Latest
Research

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Reasons To Believe
Visiting Scholar

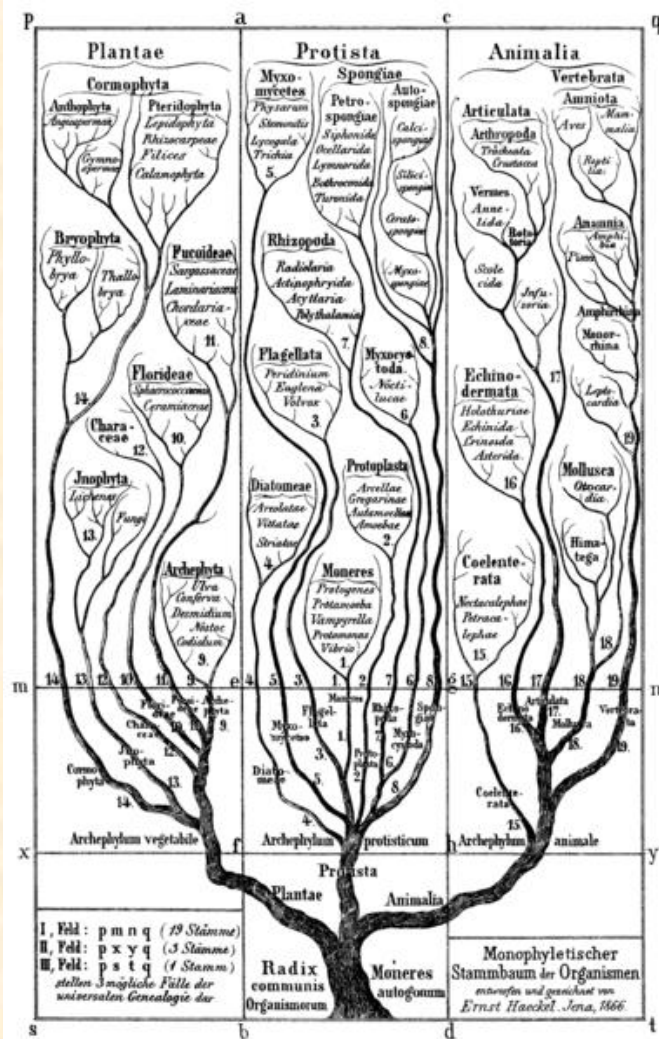


Overview

- Is Evolution Science?
- The Five Types of Evolution
- The Limits of Noncontroversial Types of Evolution
- Data Contradicting Controversial Types of Evolution
 - The Origin of Life Problem
 - The Problem of the Cambrian Explosion
 - The Phylogenetic Tree Problem
 - The Convergence Problem
 - The Accelerated Evolution Problem

Is Evolution Science?

- Science
 - Observing
 - Forming hypothesis
 - Testing
 - Falsifying or confirming hypothesis based on testing
- Is the theory of evolution falsifiable?
- Evolutionists oppose the teaching of critical thinking skills in the context of evolutionary



What is Evolution? *Some Types of Evolution Are NOT Controversial*

Note: When evolutionists say that you can “see” evolution happening all around you, they are referring to the non-controversial types of evolution. No one has observed or provided solid data for the controversial types of evolution.

Non-controversial types of evolution:

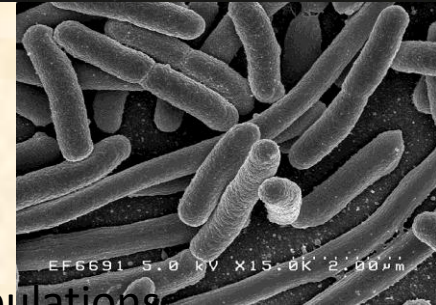
- ***Microbial evolution*** involves changes in viruses, bacteria, archaea, and single-celled eukaryotes—changes like the acquisition of antibiotic resistance in bacteria.
- ***Microevolution*** refers to changes happening within a species. For example, color changes in the wings of peppered moths.
- ***Speciation*** occurs when one species gives rise to a closely related sister species. For example the evolution of the finches on the Galapagos Islands from an ancestral finch species that came to this archipelago from South America.

Controversial types of evolution:

4. ***Chemical evolution*** refers to the processes that presumably generated the initial life-forms
5. ***Macroevolution*** refers to putative changes that require that evolutionary processes have genuine creative potential. Examples include humans evolving from a primate ancestor, whales evolving from a terrestrial wolf-like mammal.

The Limits of Non-Controversial Types of Evolution

Microbial Evolution – Long Term Study



- 50,000 generations of *E. coli* bacteria grown in 12 different containers under nutrient poor conditions.
- Mutations and “adaptations”
 - Some evolutionary “adaptations” occurred in more than one population (**convergence**) while others occurred only in single populations.
 - Uneven rate of evolution – bursts followed by lulls - hundreds of millions of mutations over the first 20,000 generations
 - Estimated by study scientists that only 10 to 20 beneficial mutations achieved fixation in each population
 - Less than 100 total point mutations (including neutral mutations) reaching fixation in each population.
 - Final population of *E. coli* were less hardy than starting strain.
 - Final population reverted to phenotype of original bacteria once nutrient poor conditions were removed (**non-directional evolution**).

Adaptation, convergence and non-directional evolution.

The Limits of Non-Controversial Types of Evolution

Microevolution - Peppered Moths

- Originally light colored moths (*typica*) found perching on lichen on trees.
- Soot from industrial revolution killed lichen and left light colored moths against dark colored background.
- Moths began to develop darker coloring (*carbonaria*).
- When air pollution laws reduced emissions and lichen re-established, moths returned to original coloring

Indicates adaptation and non-directional evolution.



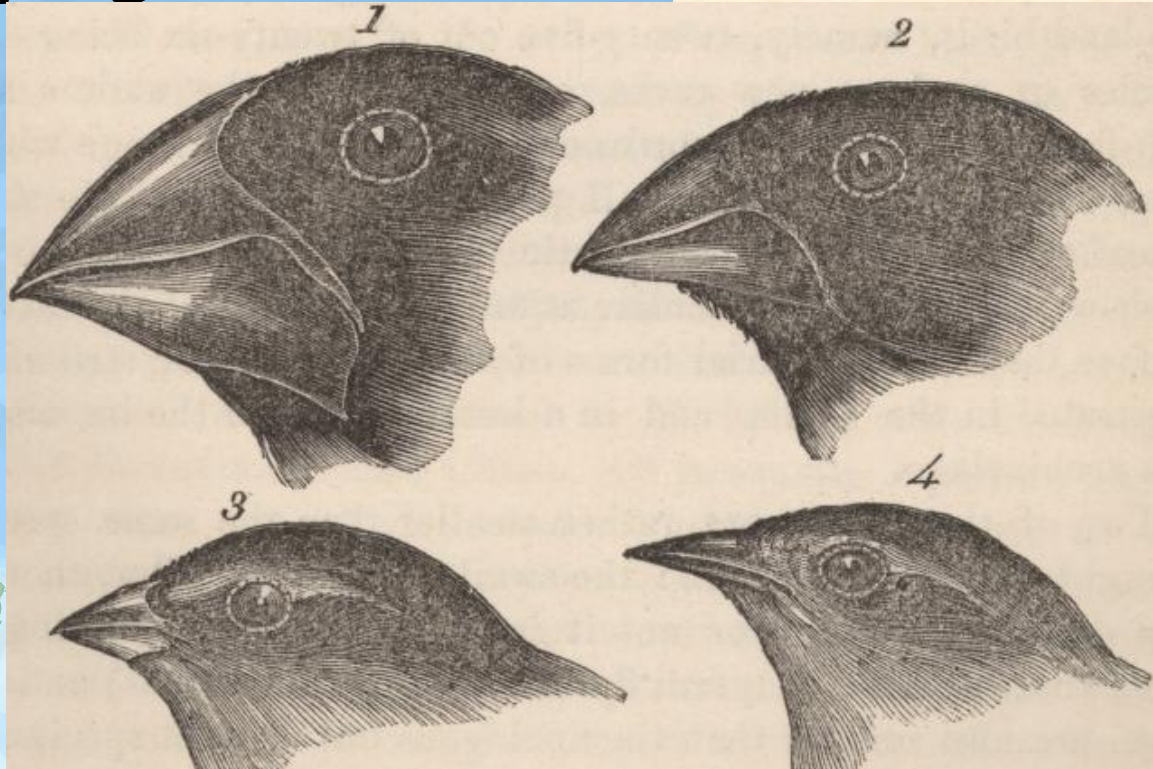
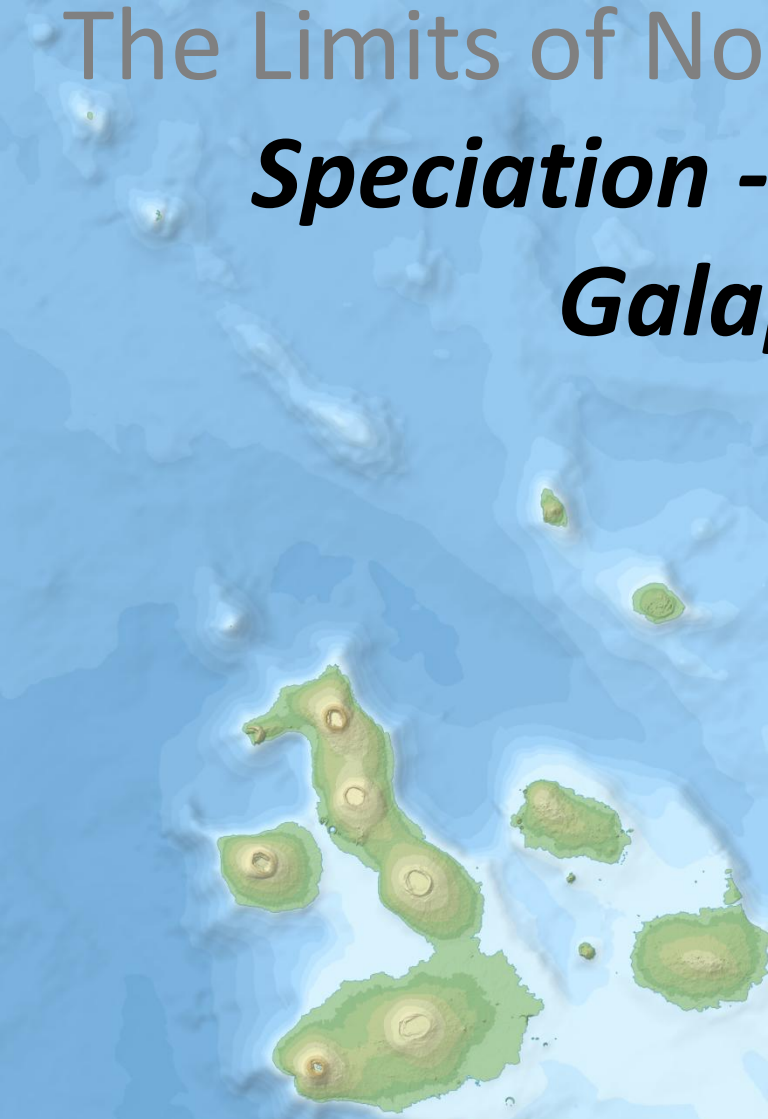
Biston betularia betularia morpha *typica*



Biston betularia betularia morpha *carbonaria*,

The Limits of Non-Controversial Evolution

Speciation - Darwin's Finches on Galapagos Islands



- Adaptation.
- Variation around a mean –
- Reversion to original phenotype under appropriate weather conditions. No real directional evolution.

Controversial: Chemical Evolution aka The Origin of Life Problem

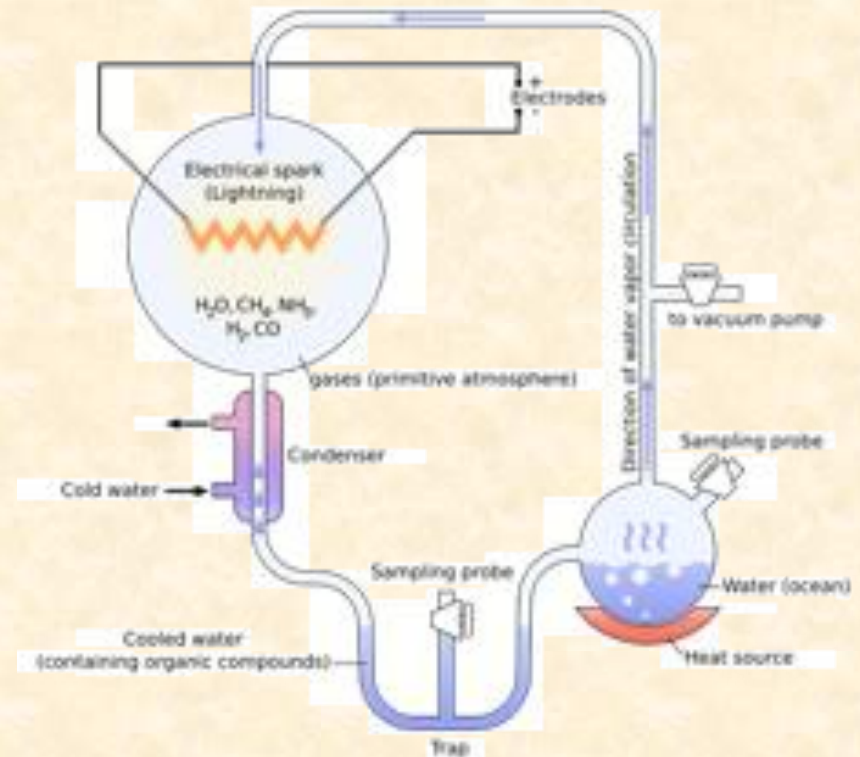
The Irrelevant Miller-Urey Experiment

Conditions in the experiment

- Methane
- Ammonia
- Hydrogen
- No oxygen

Conditions on the early earth

- Carbon dioxide
- Nitrogen
- Water vapor

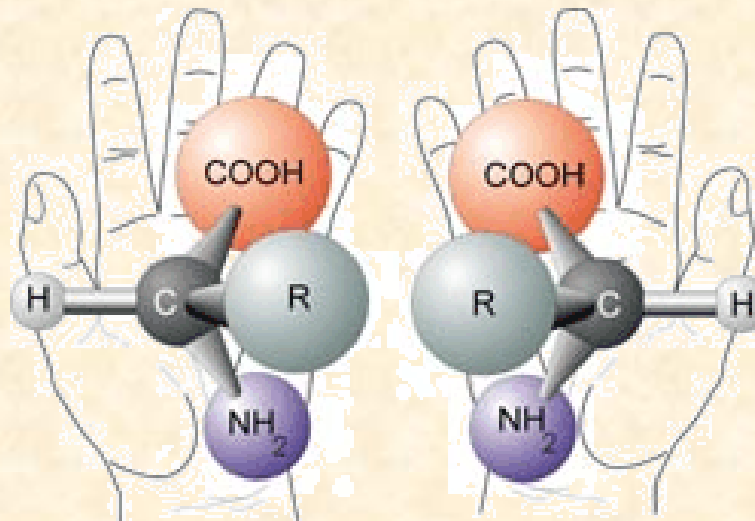


THE EXPERIMENT IS INCLUDED IN NEARLY EVERY BIOLOGY TEXTBOOK WITH NO ACKNOWLEDGEMENT OF THE PROBLEMS IN THE EXPERIMENT

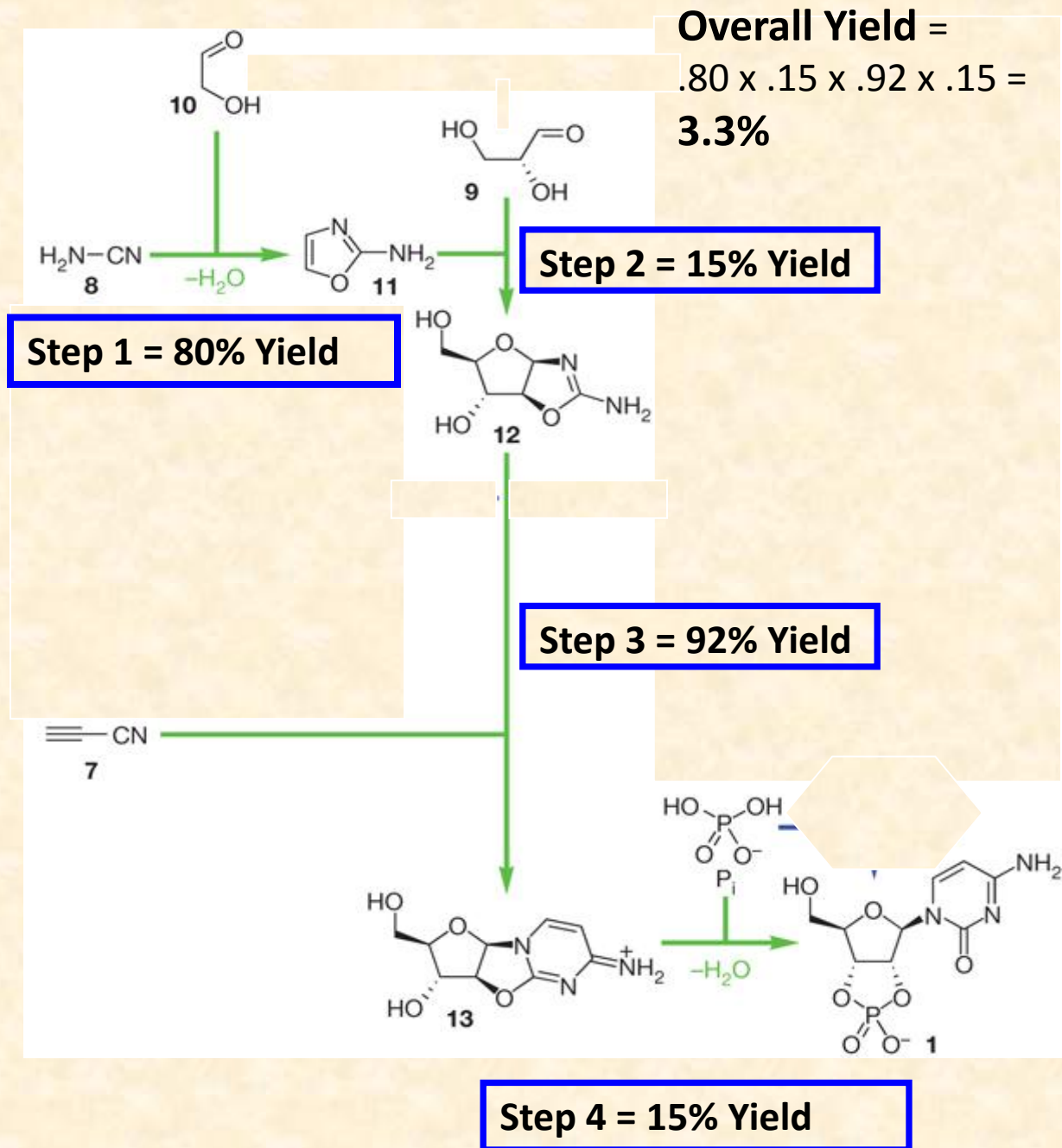
Controversial: Chemical Evolution aka The Origin of Life Problem

The Chirality Problem

- Non-superimposable molecules
- DNA and RNA require D-sugars
- Proteins require L-amino acids



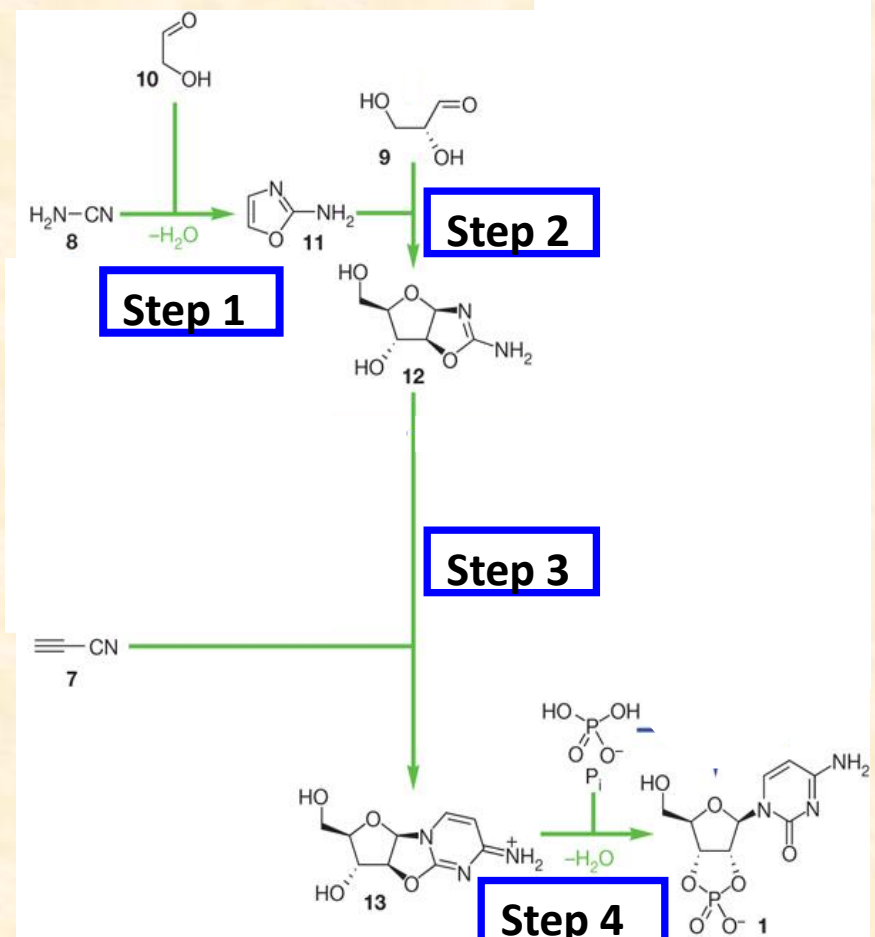
Controversial:
Chemical Evolution
aka The Origin of
Life Problem and
the RNA World
Hypothesis
Issue 1: Low
Yields



Controversial: Chemical Evolution aka The Origin of Life Problem and the RNA World Hypothesis

Issue 2:

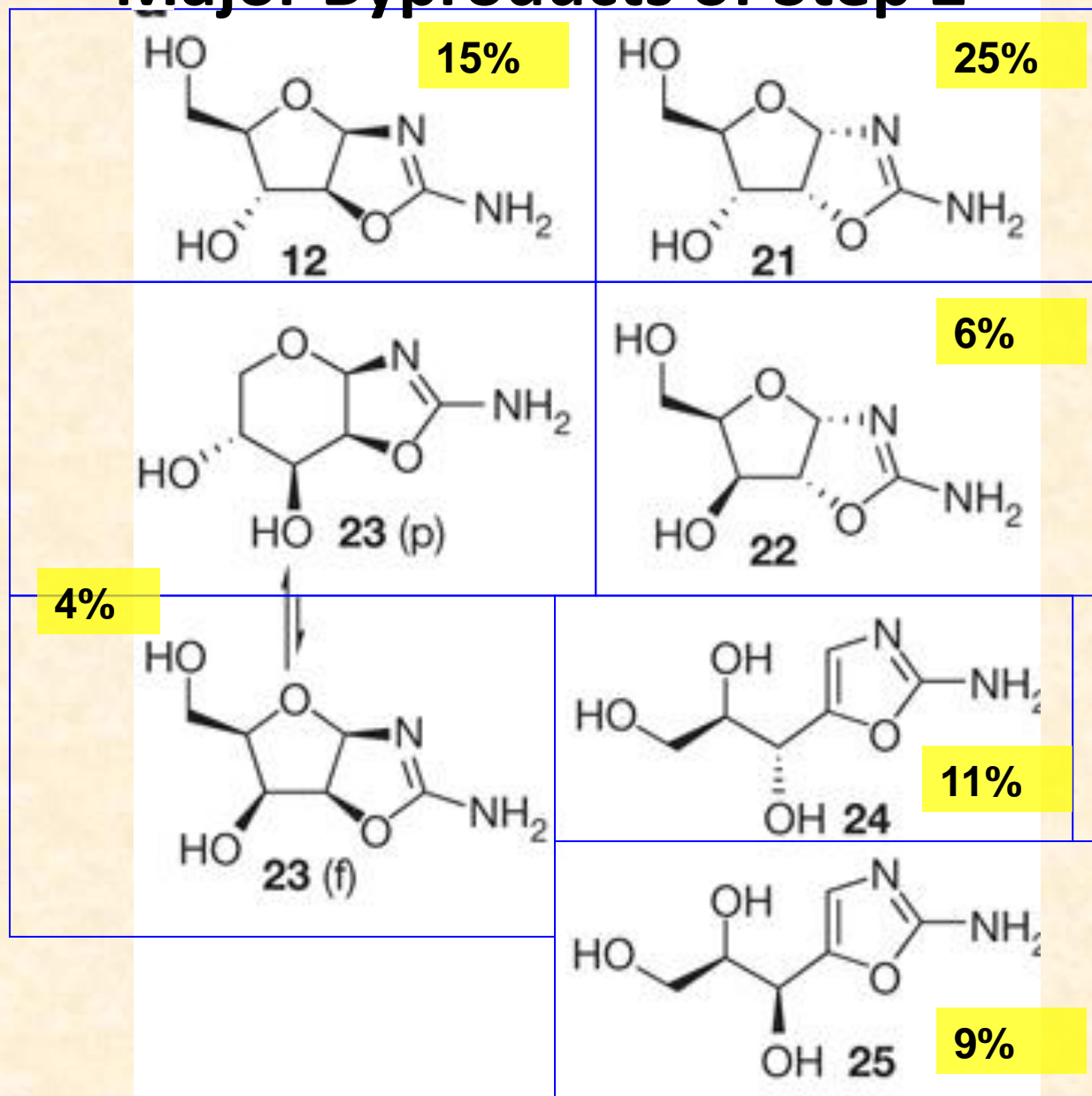
***Early earth atmosphere:
carbon dioxide, nitrogen
and water → these do not
generate organic
compounds in prebiotic
simulation experiments.***



**Controversial:
Chemical
Evolution aka
The Origin of Life
Problem and the
RNA World
Hypothesis**

***Issue 3:
Many
byproducts that
can interfere
with other
reactions***

Major Byproducts of Step 2



Controversial: Chemical Evolution aka The Origin of Life Problem and the RNA World Hypothesis

Issue 4: Intelligent Intervention Required

	Solution	pH	Temp	Time	Yield
Step 1	1 M phosphate buffer in water	7.0	60°C	3 hours	80%
Step 2		7.0	40°C	16 hours	15%
Step 3		6.5	23°C	16 hours	92%
Step 4 A	Dry, not solution	N/A	40°C 100°C	2 days 24 hours	32%
Step 4 B	Formamide solution	N/A	100°C	30 min in closed vesicle, 72 hours under reduced pressure	46%

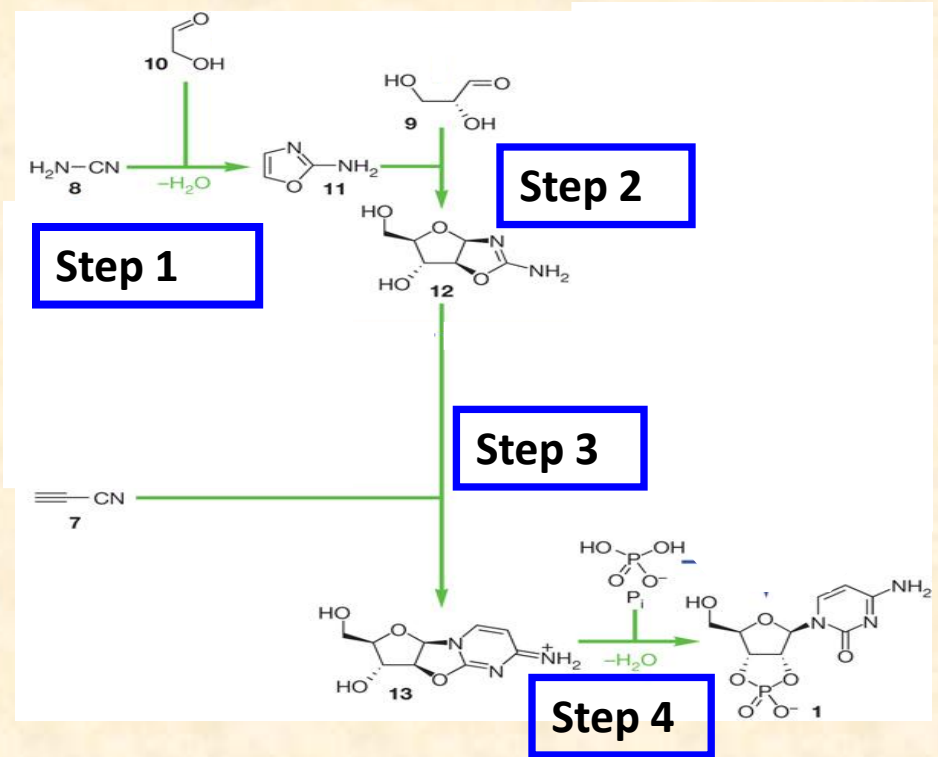
Controversial: Chemical Evolution aka The Origin of Life Problem and the RNA World Hypothesis

Issue 5: Phosphorus concentrations on early earth not as high as reaction requires

	Solution	pH	Temp	Time	Yield
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Controversial: Chemical Evolution aka The Origin of Life Problem The RNA World Hypothesis

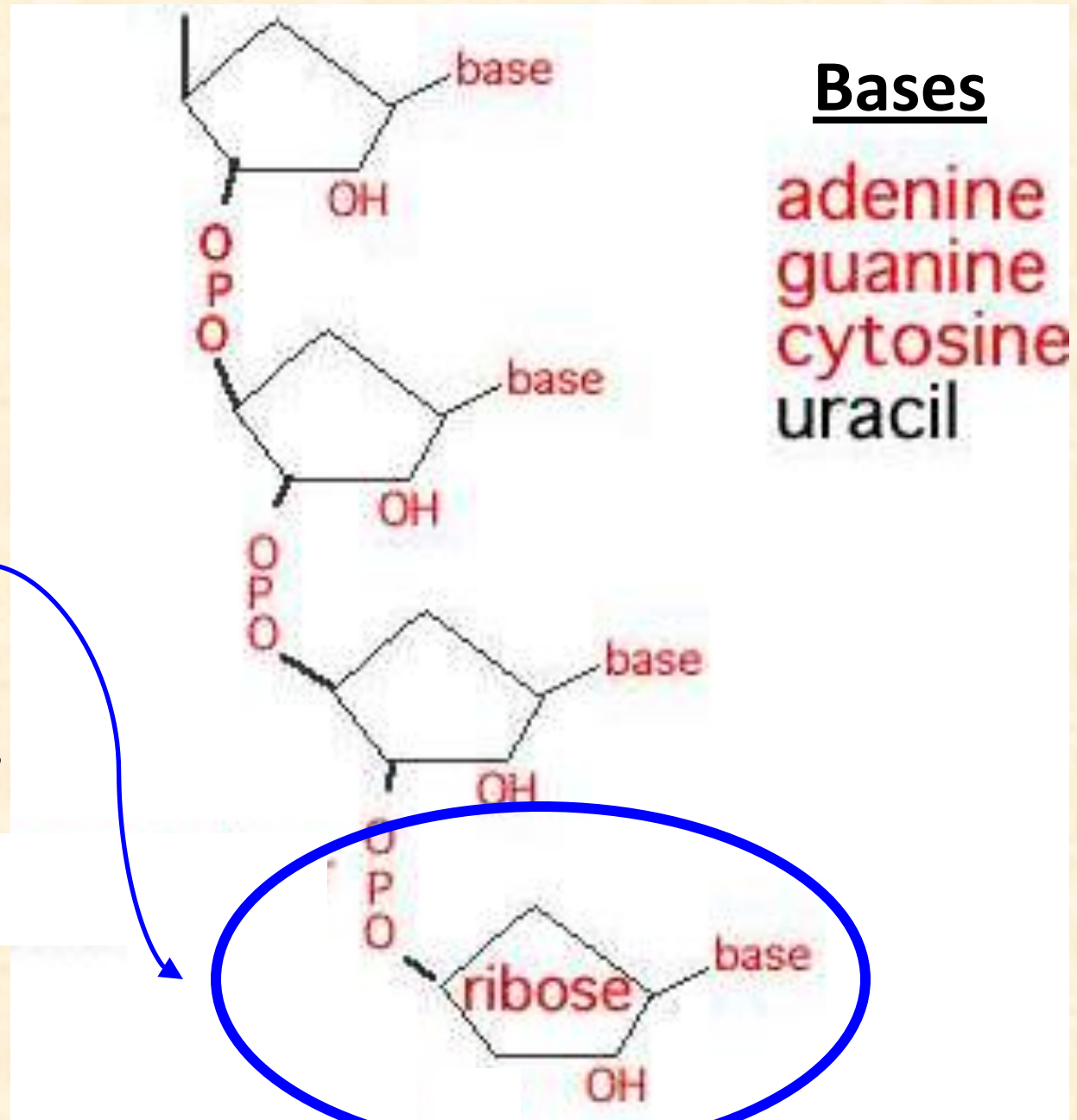
*Issue 6: Activated
ribonucleotides (those
with phosphate attached)
are highly reactive and
would have immediately
reacted with the nearest
molecule available.*



**Controversial:
Chemical
Evolution aka The
Origin of Life
Problem**

**The RNA World
Hypothesis**

*Issue 7: As soon as
anything other than an
activated ribonucleotide
attached to an RNA
chain, the RNA chain
was doomed and could
not function as RNA.*



Controversial: Macroevolution

The Problem of the Cambrian Explosion

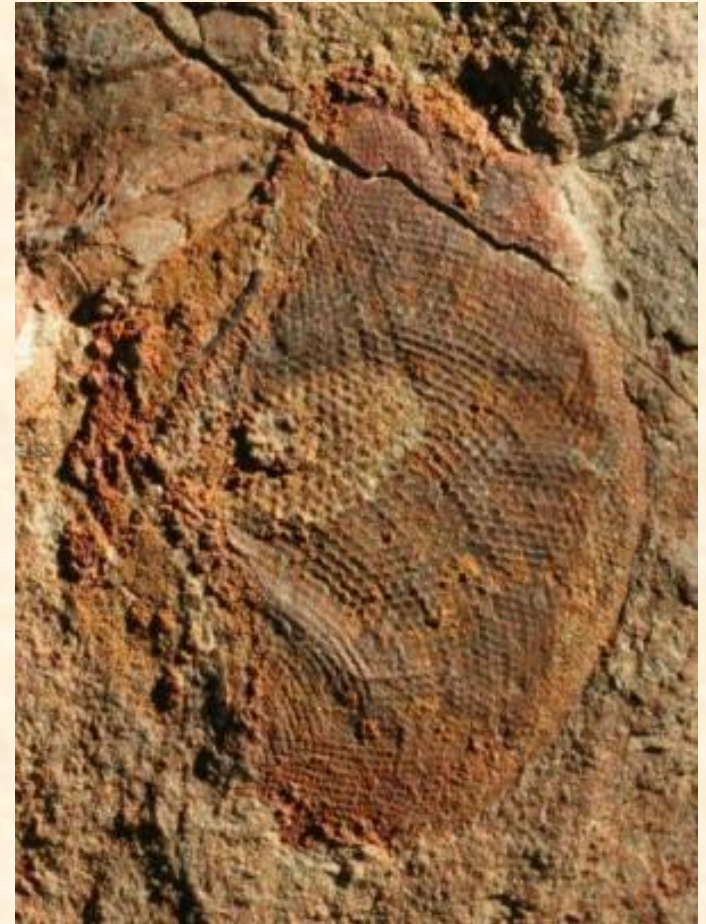
- **The Cambrian explosion**
 - 530 million years ago
 - Prior to the Cambrian, the most sophisticated organisms were simple individuals or colonies of cells. No real multicellular organisms.
 - Rapid appearance of most major classifications of animals.
- Charles Darwin saw it as one of the main objections that could be made against his theory of evolution by natural selection. (*On the Origin of Species by Natural Selection*. pp. 315–316.)
- Evolutionists speculation that multicellular organisms were too fragile or small disproved by finding of microscopic soft bodies embryos of jellyfish in the **Doushantuo Formation** in China.

Controversial: Macroevolution

The Problem of the Cambrian Explosion and Eyes

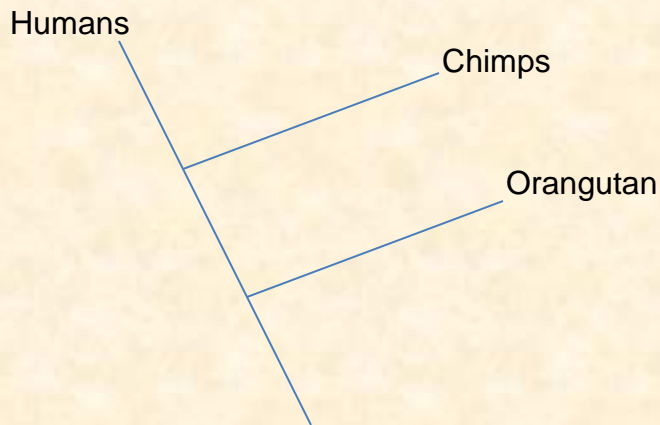
- Darwin considered eyes to be essentially perfect and well designed and said they would require a long time period to evolve.
- Evolutionists expected the fossil record to show the slow gradual change evolution of sophisticated eyes from rudimentary eyes.
- Recent finding – complex, sophisticated eyes emerged suddenly.

[“Modern optics in exceptionally preserved eyes of Early Cambrian arthropods from Australia.”](#) *Nature*, 2011; 474 (7353): 631.



Controversial: Macroevolution

Humans Descended from Chimps – Phylogenetic Tree Problem

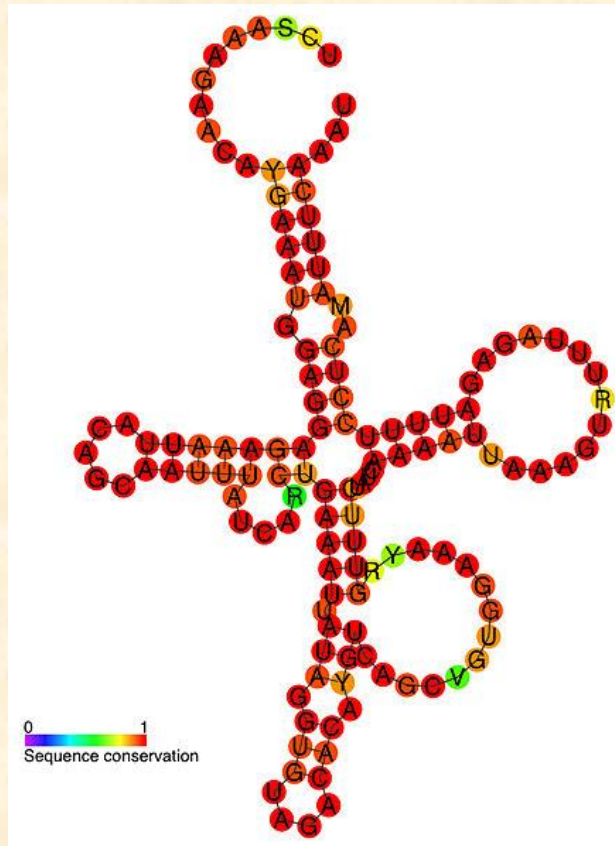


- Different phylogenetic trees are generated depending on which genes you use for generating the tree – this should not be the case if evolution is true.
- Quote: “Thus, in two-thirds of the cases, a genealogy results in which humans and chimpanzees are not each other’s closest genetic relatives. The corresponding genealogies are incongruent with the species tree. In concordance with the experimental evidences, this implies that there is no such thing as a unique evolutionary history of the human genome. Rather, it resembles a patchwork of individual regions following their own genealogy.”

“Mapping Human Genetic Ancestry”,
Mol. Biol. Evol. 24(10):2266–2276.
2007.

Controversial: Macroevolution

“Accelerated” Evolution - HAR1F



Controversial Macroevolution

The Convergence Problem

- Multiple flasks of E. coli having same mutations
- The multiple, independent origin of echolocation in twice in bats and once in toothed whales