

Evolution

Evolution

1. change in ~~the~~ ^{Gene} frequency
2. In a population
3. Over time

(Micro evolution)

The Population changes in frequency

1. Physical
2. Behavioral
3. ~~Character~~ Chemical

A species is one that can interbreed and create viable offspring.

Macro evolution

- Physical separation
- Separation
- Reproductive isolation

Evolutionary thought

- Anaximander: Simple life forms evolve into complex ones
- Aristotle: species are fixed and do not evolve.
- Archbishop James Usher: Earth is 6000 yrs old & Aristotle is correct
- Judeo-Christian: All species were individually designed and created.

Prior to Darwin

Carolus Linnaeus: Binomial Nomenclature & classification
hierarchy K P C O F G S

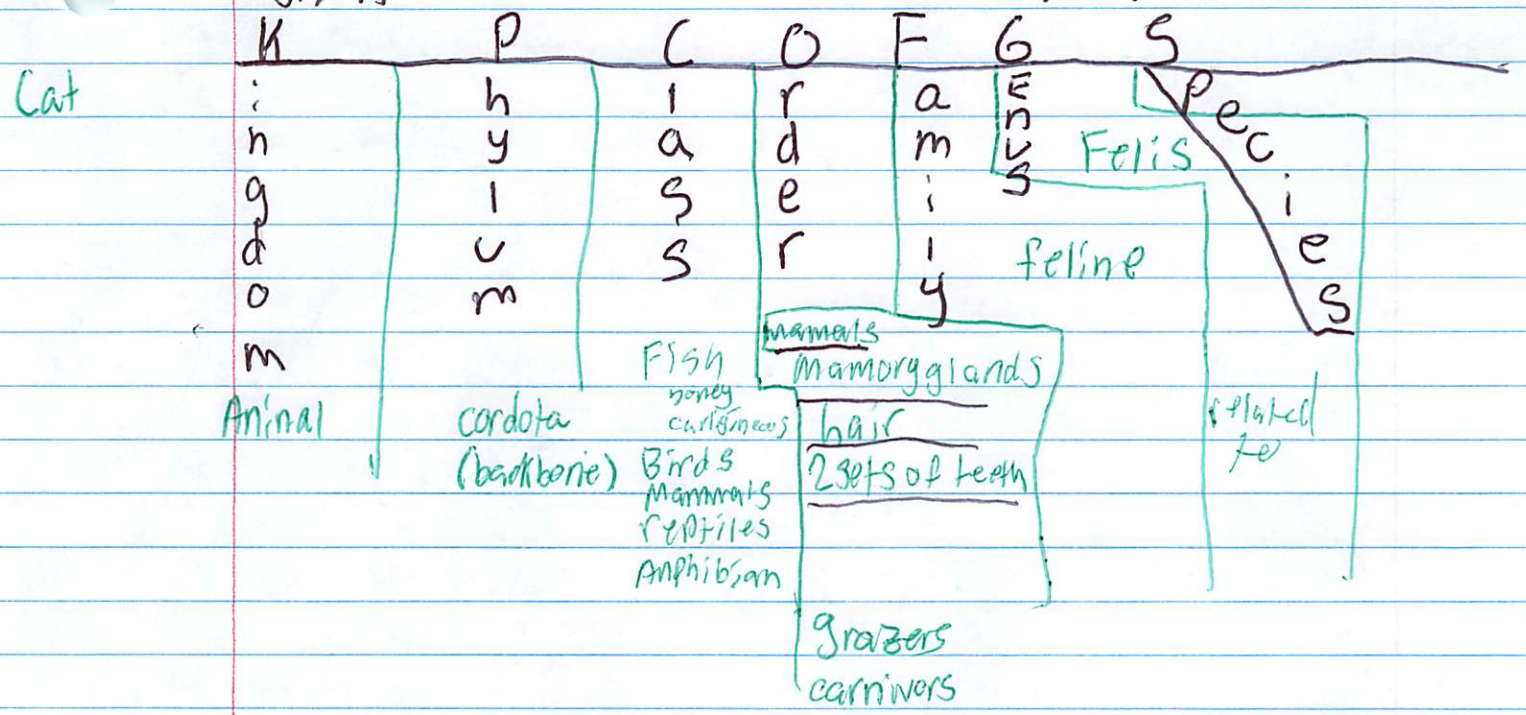
Hutton: Geology - gradualism

Baron Cuvier: Catastrophism

Evolution continued

6/7-14

Naming system



Catastrophism - God didn't see important to explain previous destructions.

Buffon: He says years is over 6000 years; and he goes to town square proclaims his findings. Teaches & Reviews;

Lamarck: Fossils are related to modern forms because life evolves acquired characteristics are inherited.
Inheritance for acquired characteristics.

Charles Lyell: "Principles of Geology" uniformitarianism
uniformitarianism

1860-1861

1860 Darwin sets out
civil war

Screw ~~being~~ doctrine school
went to Priest school

gets a degree in biology

(Darwin gets hired as Captain's companion
supposed to map east coast of South America
seasick for 5 years every day

He reads Lyell's Principles of Geology

and he also read Malthus's Essay on Human Populations,
when he returns he spends 20 years writing his theories.

- Alfred Wallace conceived a theory almost identical to Darwin's;
both works were presented to the scientific community.
- Darwin's On the Origin of Species by Means of Natural
Selection was published in 1859.

Darwin's Mechanism

1. over production

Population produces more than the individual can support.

2. individual variation

Individuals are different

His claim "Differential Reproductive Success"