

# What is True Based on Observable Science

A group of similar organisms that can mate with one another to produce fertile offspring is known as a species.



True!

A **variation** is any difference between individuals of the same species.



True!

A change in a gene at the DNA level is called a mutation.



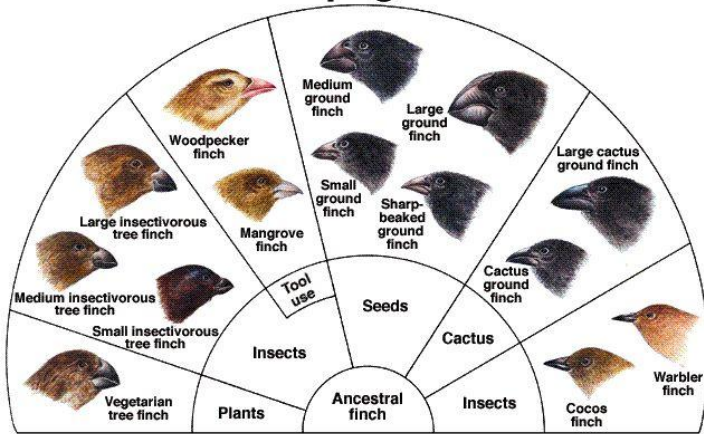
True – Observable science shows that mutations are a destructive force in regards to genetic information and there is not one example of mutations creating new functional genetic information.

Classroom Question – What is an example of new genetic information being created by mutations?

Darwin attributed the differences of the plants and animals that lived on the Galapagos and South America to examples of **adaptation**, a trait that increases an organism's ability to survive and reproduce.

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### Darwin's Theory of Finches on the Galápagos Islands



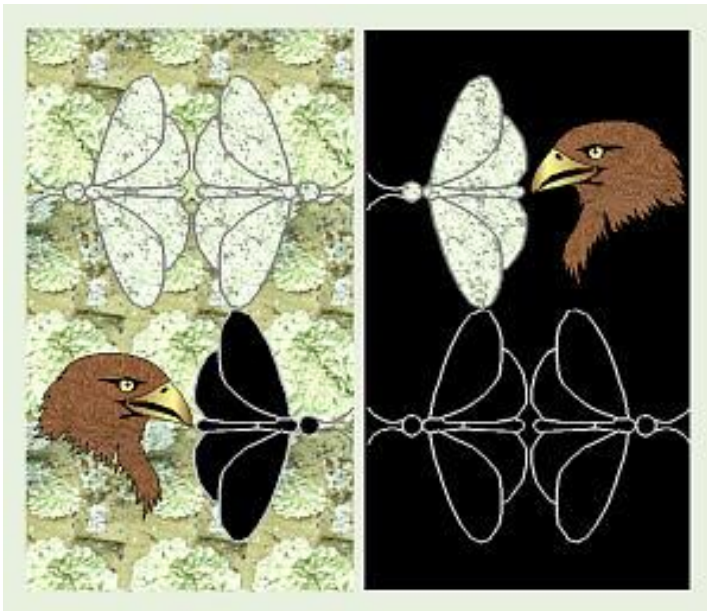
True. However, an adaptation is never a result of new genetic information being created. It results from gene expression or mutation of existing genetic information.



**Natural selection** is the process by which individuals that are better adapted to their environment are more likely to survive and reproduce more than other members of the same species.

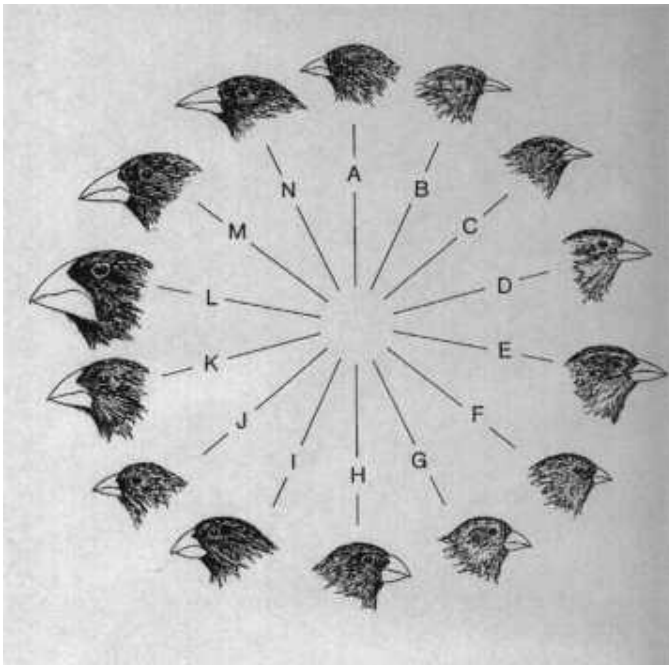
True – But remember that NS is always removing traits and genetic information from a population, not adding it.

[Click Picture for Article](#)



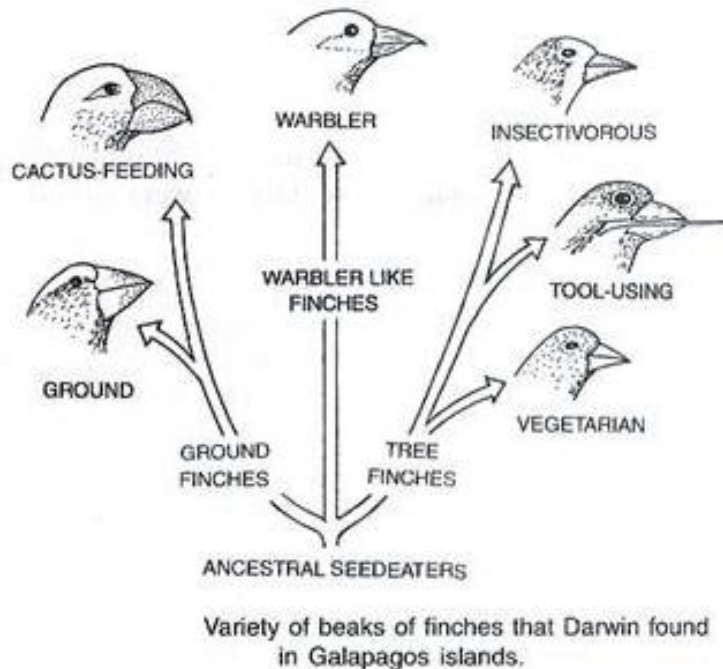
In moths, the white color was a result of a genetic mutation of existing information, not new information. It is a great example of a mutation that creates a change that happens to be beneficial to an organism. These types of mutations are in the minority.

Darwin realized that the 14 different finches and the finches on the South American continent were all similar, but slightly different.



True – This is an example of Micro Evolution (aka Adaptation and Speciation), Not Macro Evolution. The beak changed due to epigenetics, which is where the environment causes certain genes to be expressed differently. This is why you see the beak of the finch change rapidly based on wet seasons.

Darwin hypothesized that species gradually change over many generations and become better adapted to new conditions.



True – Changes come forth from existing genetic information and epigenetic changes. This follows the Biblical Orchard of Life where a Kind is limited in how it can change based on the originally created genetic information.



The large ground finch's beak has adapted to work like a nutcracker for breaking big, hard seeds.



True - This is adaptation. It is still a bird and no new genetic information was created – only changed or expressed differently.

The solidified remains or imprints of once-living organisms are called fossils.



[Smithsonian Article](#)

[ICR Research Article](#)

[CMI Article](#)

True – Did you know actual dino bones have been dug up and muscle, blood cells, stretchy tissue and fragments of fragile DNA have been found! Not to mention the bones have been carbon dated to no more than 50,000 years old.

Classroom Question – How could dino bones, muscle, blood and DNA survive for millions of years?

# Fossils are commonly found in sedimentary rock.



True – What is sedimentary rock? Rock that has formed through the deposition and solidification of sediment, especially sediment transported by water, ice, and wind.

Mass extinction  
was sudden all  
over the Earth!

Classroom Question – Does this mean these creatures likely died and were buried rapidly by water?

# All fossils are found in the outermost layer of earth called the crust.



True – How did the layers get there? Uniformitarianism vs Catastrophism – Paleontology and Geology is very susceptible to preconceived beliefs.

What do we know about the layers? Typically no erosion between the layers, folded layers, rapid erosion happens.

Examples of Rapid Erosion

Providence Canyon – GA

Burlingame Canyon – WA

Lake Canyon Gorge - TX

# What is False and a Religious View



Scientists think that Earth formed 4.6 billion years ago.



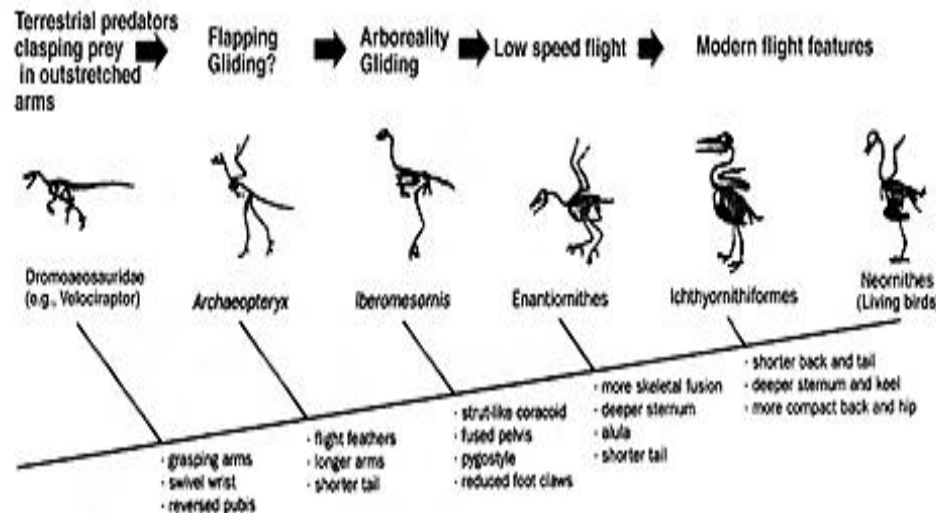
Religious View – This is based on many assumptions and circular references.

Age of Earth Based on Meteorite

101 Evidences of Young Earth

Scientists think that since the Earth is around 4.6 billion years old that there is plenty of time for organisms to develop adaptations, species to die out and be replaced by newer species, and for evolution to occur.

Macro Evolution requires vast amounts of time to make it seem that random mutations could create complex genetic information. That is why long ages will be defended at all costs.



The odds of the smallest virus forming by chance is  $10^{540}$ . There are  $10^{80}$  atoms in observable universe. Evolution must have vast amounts of time to setup smoke and mirrors.

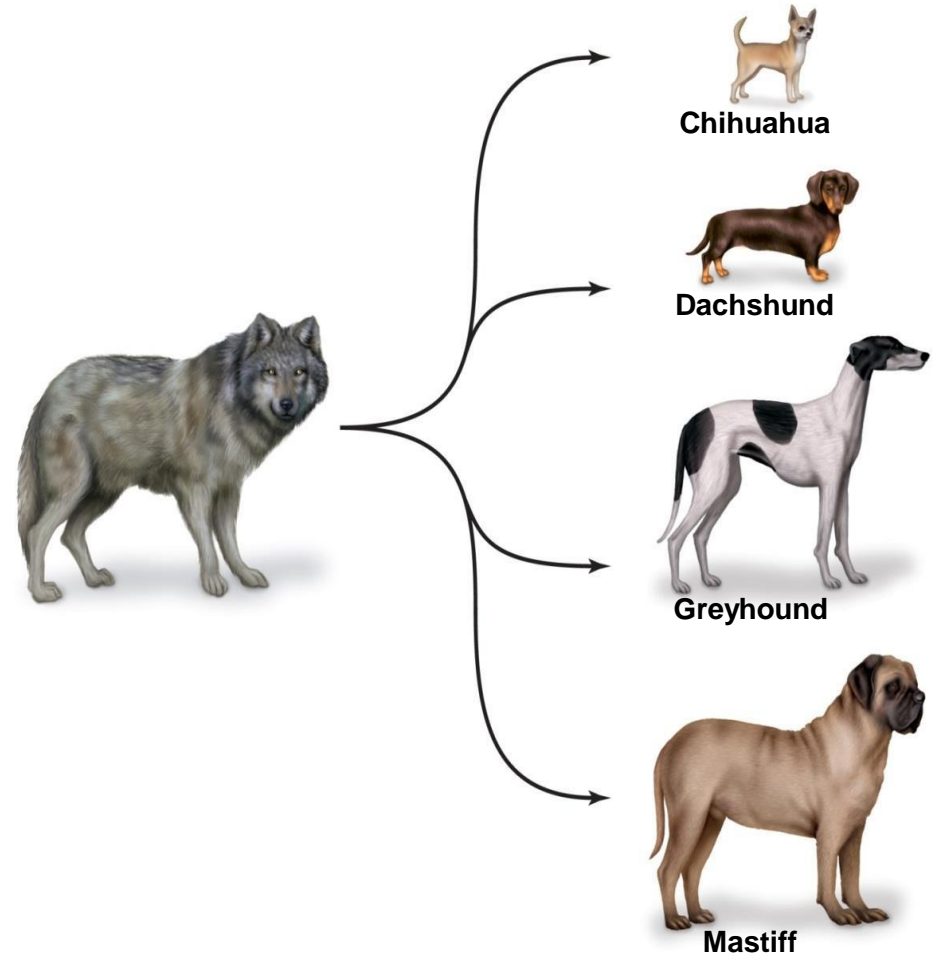
# Can selection produce major evolutionary changes?

- Most scientists think that natural selection is the process responsible for the evolutionary changes documented in the fossil record.  
**Misleading: Natural Selection is the mechanism to select traits based on existing, changed, or degraded genetic information – this is micro evolution or adaptation and removes genetic information. Genetic information must be added to accomplish Macro Evolution**
- Some critics of evolution accept that selection can lead to changes within a species, but not the substantial changes documented in the fossil record.
- **Micro evolution does lead to changes. The fossil record shows no proof of new genetic information being created by random mutations.**
- This argument does not fully appreciate the extent of change produced by artificial selection
  - Dog breeds would be species if found as fossils **Let's take a look!**

# • Domestication

- Human-imposed selection has produced a variety of cats, dogs, pigeons, and others
- **Misleading** – It is well documented that domestic dogs originated from the Grey Wolf. Biblically they would all be considered of the Wolf Kind. The Grey Wolf has great genetic diversity, meaning many traits are possible. Breeders pull out specific characteristics and what results is a dog that has their genetic diversity stripped out. You can't breed a Chihuahua back into a Grey Wolf, because it has a stripped down genetic information. This is MICRO EVOLUTION!

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# Evolutionary transitions

- Given the low likelihood of fossil preservation and recovery, it is not surprising that there are gaps in the fossil record
  - Intermediate forms have been found
  - Oldest known bird fossil is the ***Archaeopteryx***
    - Clearly intermediate between bird and dinosaur
    - Possesses some ancestral traits and some traits of present day birds
- False – Even evolutionists say this is just a bird -**  
<http://science.sciencemag.org/content/259/5096/764>





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## Archaeopteryx

*Just a Bird – Note the way most fossils have head thrown back. This position is indicative of suffocation from drowning.*

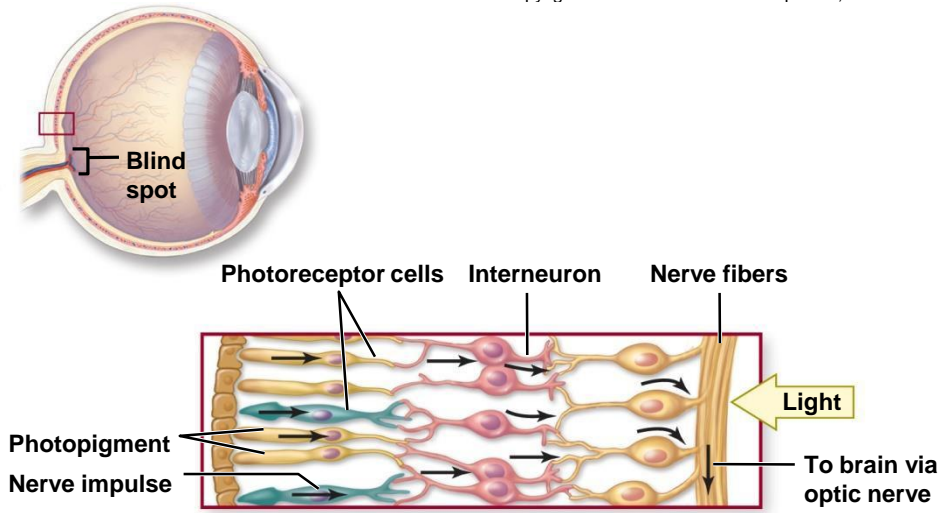
- Recent discoveries

- Four-legged aquatic mammal

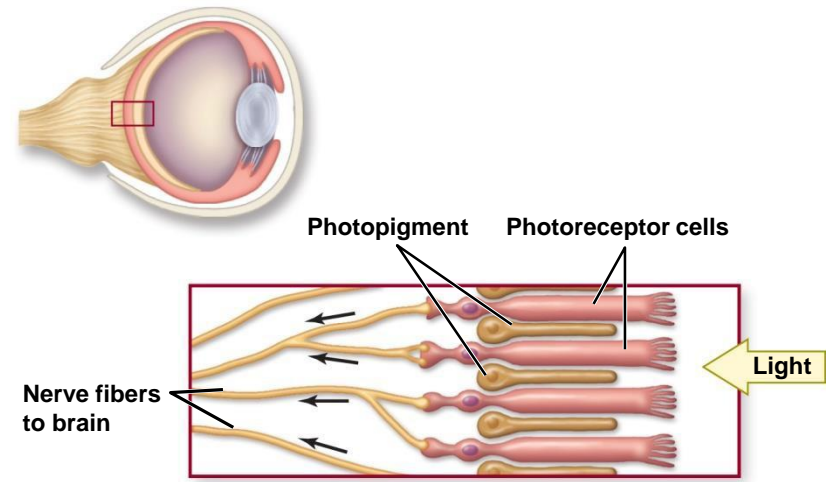
- Important link in the evolution of whales and dolphins from land-dwelling, hoofed ancestors

- Religious belief

- Fossil snake with legs – Very possible, even the Bible says snakes used to have legs. Remember – this is a loss of genetic information, not a gain.
- *Tiktaalik*: a species that bridged the gap between fish and the first amphibian – Great example of how one's preconceived assumptions drive a conclusion. See this [article](#)
- Oysters: small curved shells to large flat shells – This is adaptation, not macro evolution!



a.



b.

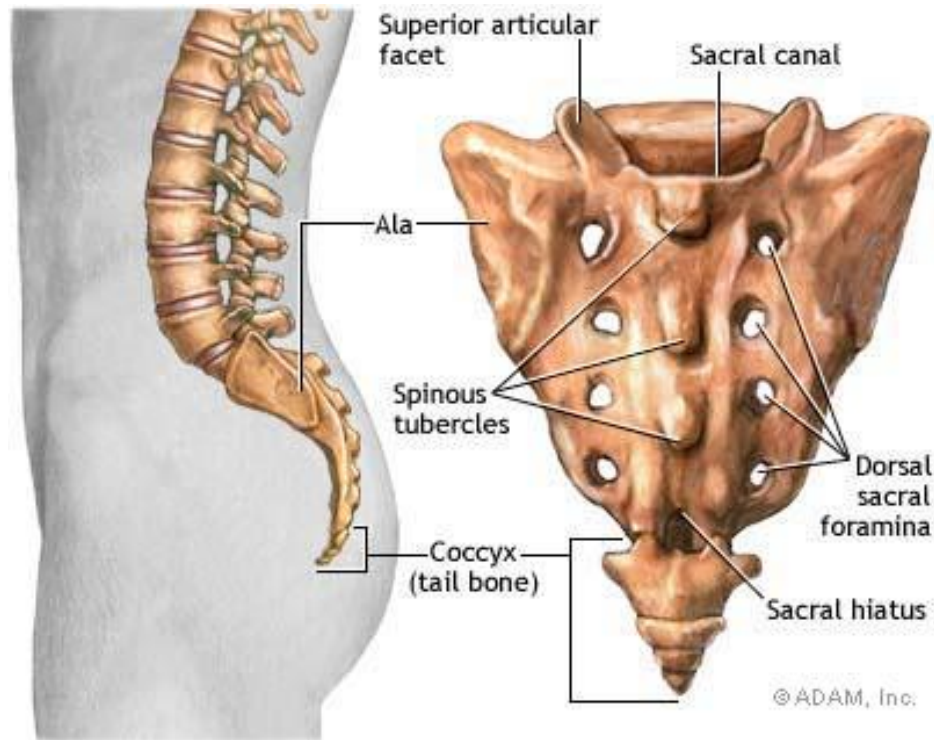
- Eyes of vertebrates

- Photoreceptors face backward
- Nerve fibers slightly obscure light and create a blind spot
- Mollusks' eyes are more optimally designed with no obstruction or blind spot

— **Misleading** – <http://creation.com/is-our-inverted-retina-really-bad-design>

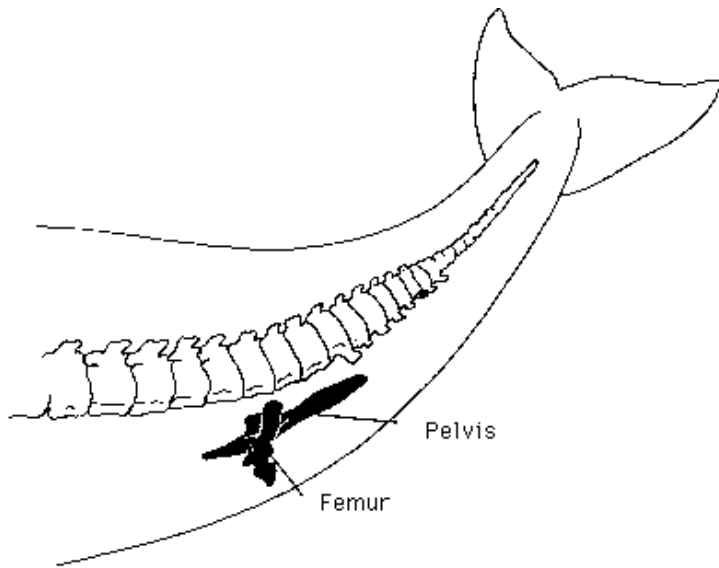


The small bones at the end of the human tailbone have no apparent function today, although they may once have been useful . Therefore they are a vestigial structure.



Religious Belief -  
See conclusion in  
human tail article.

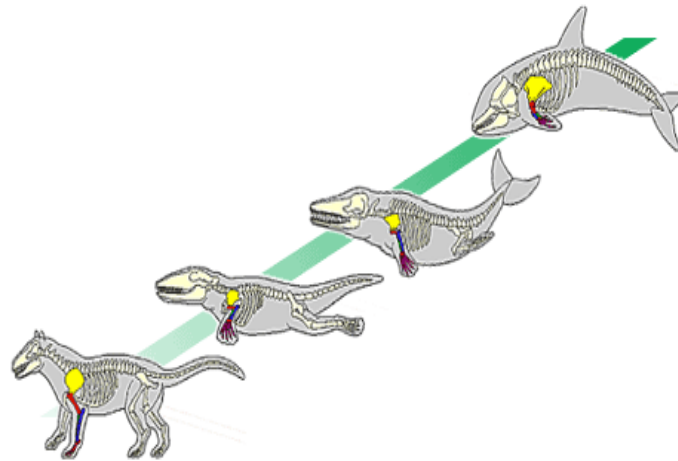
Remnants of hind-limb bones embedded deep inside the whale's body is also an example of vestigial structures.



False – These bones are not useless, but are important for mating of whales.



# Theory of Whale Evolution



Religious Belief - Macro Evolution says amoeba to fish to lizard to land mammal, and it decided to go into ocean and became a whale.

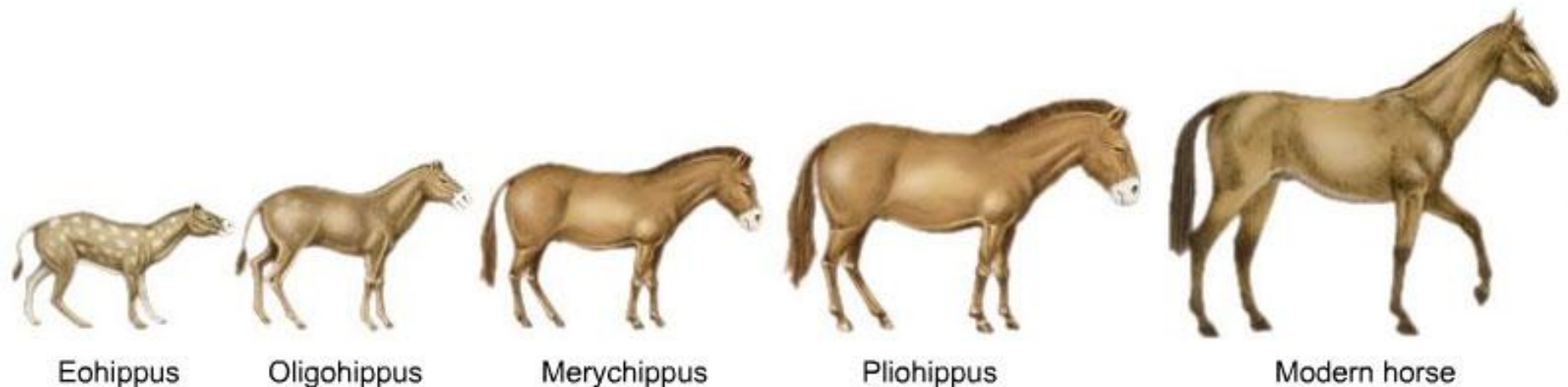
There is no evidence for this and is a faith based conclusion. These changes require vast amounts of new and changed genetic information. Evolution would say this would occur through random mutations, but observable science shows mutations destroy information. Just think of all the changes – skin, blow hole, respiratory system, teeth, etc..

Classroom Question – How much genetic information would have to be created to make these changes?

The process by which organisms change over time by passing inheritable traits to their offspring is called evolution.

Religious Belief! You decide which makes more sense.

Evolutionist Horse Video  
Creationist's Horse Video



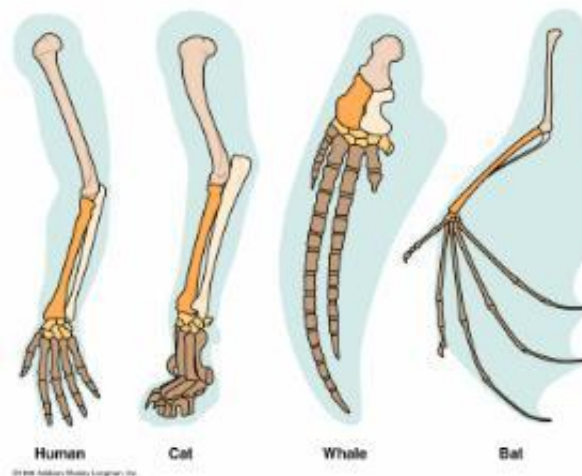
The opposable thumb is an example of an adaptation that helps humans survive.



Religious Belief – Adaptation is used incorrectly here. The genetic information behind the thumb is huge. An intelligent designer is a better explanation rather than random mutations, but both are religious views.

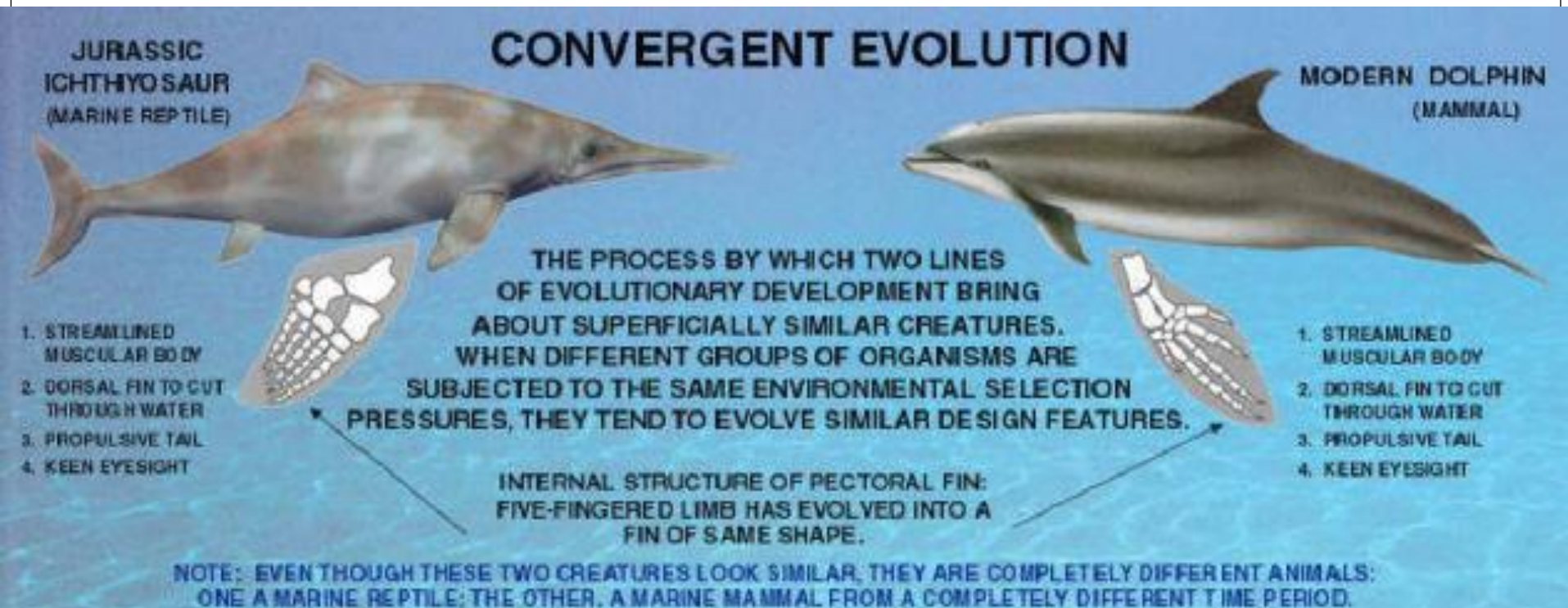
A human's arm, a cat's front leg, a dolphin's front flipper, and a bat's wing have similar kinds of bones suggesting that they may have common ancestors.

This is a religious view. A Creationist's religious view would include: Video 1 and Video 2



Convergent evolution is the process by which unrelated organisms evolve characteristics that are similar.

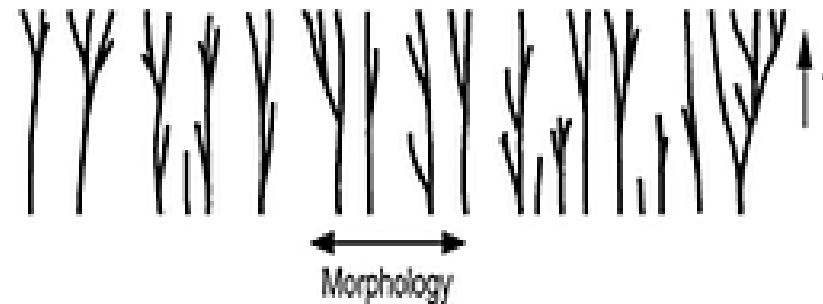
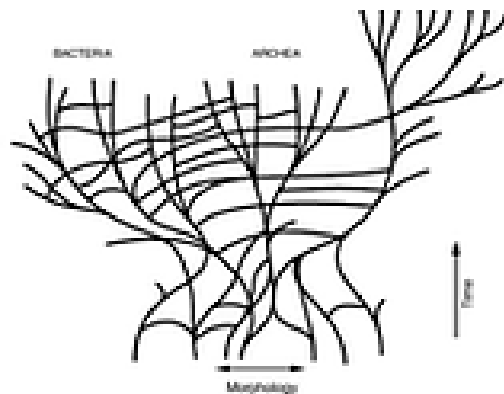
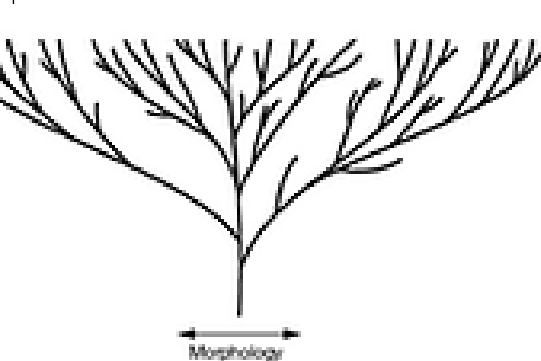
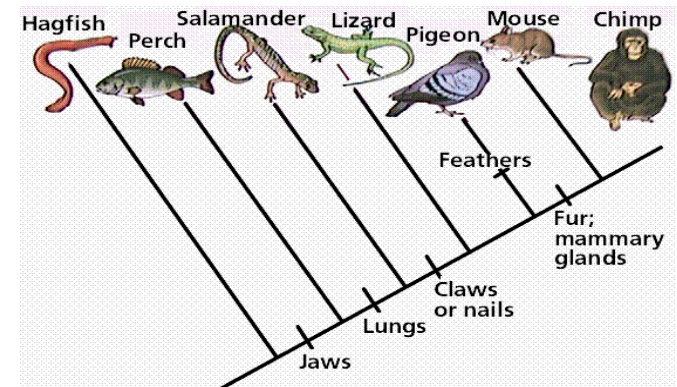
Or they were designed with similar features – Both are religious views.





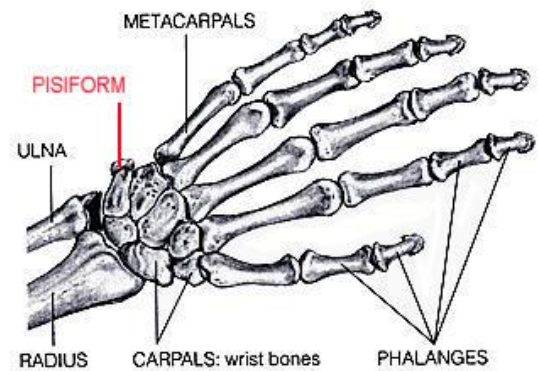
A branching tree diagram shows probable evolutionary relationships among organisms and the order in which specific characteristics may have evolved.

More religious views! Actually, Evolution would need the “Web of Life” to account for convergence and cross evolution. Compare this with the Creation Orchard of Life



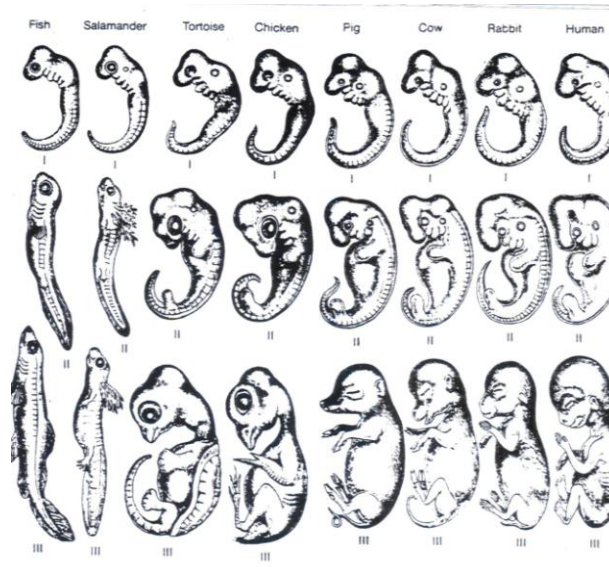
Comparing different organisms' skeletal structures, DNA, and embryonic structures all provide evidence that supports the theory of evolution.

More religious beliefs! Similar skeletal structures could be a common designer, DNA completely refutes macro evolution, see next slide for embryonic structures.



Embryos of vertebrates are similar suggesting that they have common ancestors. Vertebrate embryos have a tail, buds that become limbs, and pharyngeal pouches.

**False!** Haeckel's Embryo Lie 1 and Lie 2



# Darwin's critics

- Nearly universally accepted by biologists – True – If they don't accept it they will be blacklisted and be out of a job. Here is an example.
- Source of controversy for some in the general public
- 7 principle objections
  1. Evolution is not solidly demonstrated
    - Just a theory like the theory of gravity
    - Gravity is testable and observable, Macro evolution is not!
  2. There are no fossil intermediates
    - Many intermediates have been found since Darwin's time. False – All are suspect and subject to one's preconceived assumptions.

### 3. The intelligent design argument

- Too complex for a random process – **TRUE!**

### 4. Evolution violates the Second Law of Thermodynamics

- Things become more disorganized
- Earth is not a closed system and energy is constantly added from the Sun – **True, bad argument for Creationists**

### 5. Proteins are too improbable

- Probability of hemoglobin as random event =  $(1/20)^{141}$
- Can't argue backwards – what are the odds of students having the birthdates they do in class

**Very Misleading – Math and probabilities should be considered when evaluating a theory that is unproven in order to determine feasibility. The birthdates comparison makes no sense. We know from observable evidence that people are born on a specific day. It would be like me saying God exists, what are the odds of students having the birthdates they do in class.**

- 6. Natural selection does not imply evolution
- No scientist has evolved a fish into a frog – **True, it is impossible through random mutations and natural selection!**
- Artificial selection has produced differences more distinctive than those between wild species – **Misleading – any artificial selection, such as with dogs, works on existing genetic information and doesn't create any new genetic information.**

## 7. The irreducible complexity argument

- Intricate machinery of cell cannot be explained by evolution from simpler stages – **True!**
- Natural selection can act on a complex system because at every stage of its evolution, the system functions – **Religious Belief, there is no working hypothesis for this.**