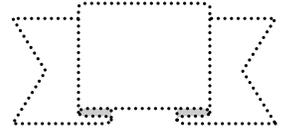




Evidence & Examples of Evolution



Example #1- Peppered Moths

Explain below how and why the moths changed over time-



Example #2: Antibiotic Resistance in Bacteria

Example #3: _____

There are numerous examples of humans performing their own type of selection (hence: artificial) on _____, _____ traits belonging to a variety of organisms.

3 (more!) examples:

#1:

#2:

#3:

Artificial selection is also important as it acts as an _____ on natural selection.

Experimentation is the ultimate _____ of a scientific hypothesis, without it you can never be sure that a _____ (i.e. the environment selecting for traits) you observe is _____. In artificial selection, _____ are the manipulators (we are the environment)- we _____ which individuals get to _____.

We would expect to see what is found in _____ - that the individuals who reproduce pass on their genes/traits, and that is exactly what we see. Artificial selection can also be used as _____ of evolution.

Scientific Evidence for Evolution:

1) Fossils:

Fossils do show _____ stages, despite their rarity. And geological _____ consistently reveal the same _____ of fossils! A quick and simple way to debunk the theory of evolution would be to find a fossil _____ in the same stratum as a _____.

For example, there are now at least _____ intermediate fossil stages identified in the evolution of _____.

2) Vestigial Structures:

An _____ present in the organism but either _____ in size or has no _____.

Examples (Pick 3, human or non-human):

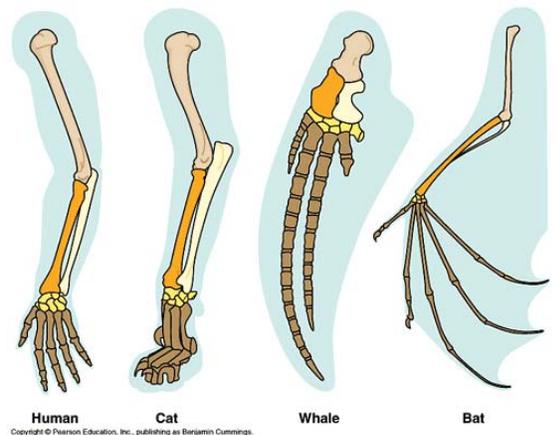
- _____
- _____
- _____

3) Homologous Structures:

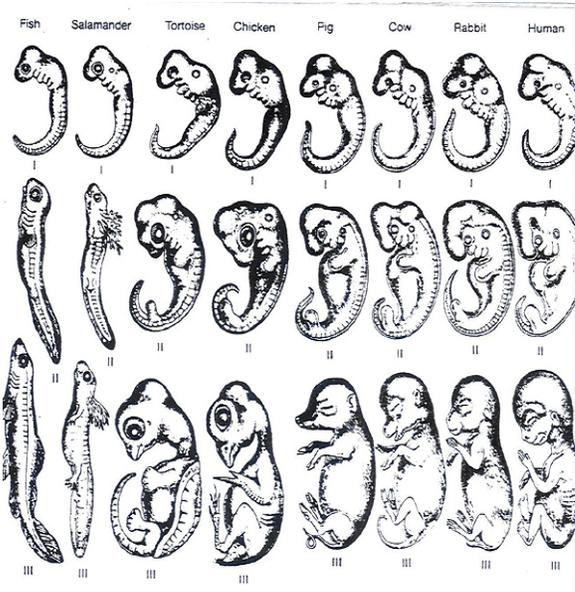
Similar _____ in very different organisms is evidence of a _____ ancestor.

An example of this is the similarity of the _____ between _____.

Every _____ in a bat has its own identifiable _____ in a human. Identifiable, because of the _____ in which they join up. Only the _____ are different.



4) Embryonic Development:



Physical similarities between _____ of different species at different _____.

Though humans share _____ with other animals, stages of human embryonic development are **not** _____ equivalent to the adults of these shared ancestors.

In other words, what does that mean:

Darwin's view:

That early embryonic stages are similar to the same _____ stage of related species but not to the _____ stages of that species, has been _____ by modern evolutionary developmental biology.

5) Universality of the Genetic Code

All organisms share the same genetic code, based on the series of:

_____.

The more _____ the more alike the _____.

_____.

