

Evidence of Evolution

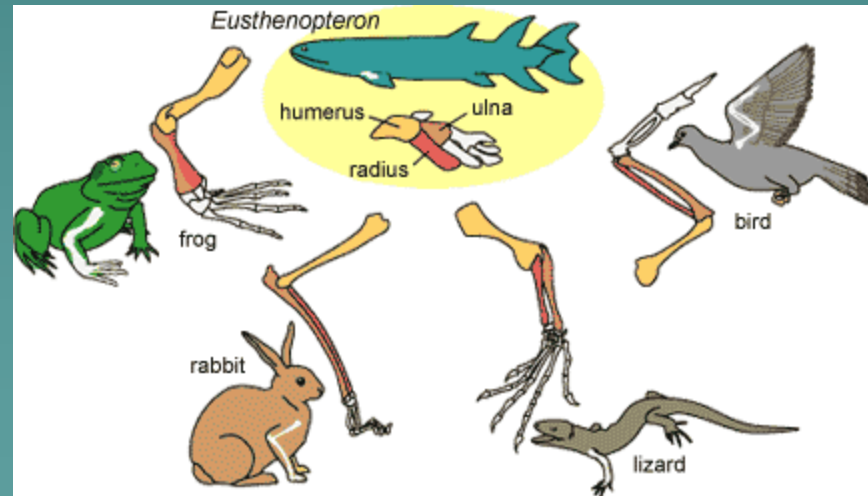


The Fossil Record



Comparative Anatomy:

- ◆ Similar Structures inherited for a common ancestor.
 - Homologous Structures: Structures that are similar in different organism.
 - ◆ Human arm and hands
 - ◆ Horse Leg
 - ◆ Cat leg/paw
 - ◆ Porpoise fins
 - ◆ Bat wings



- Vestigial Structures: Structures that are the reduced forms of functional structures in other organisms.
 - ◆ Kiwi bird-Wings that are not affective
 - ◆ Human appendix

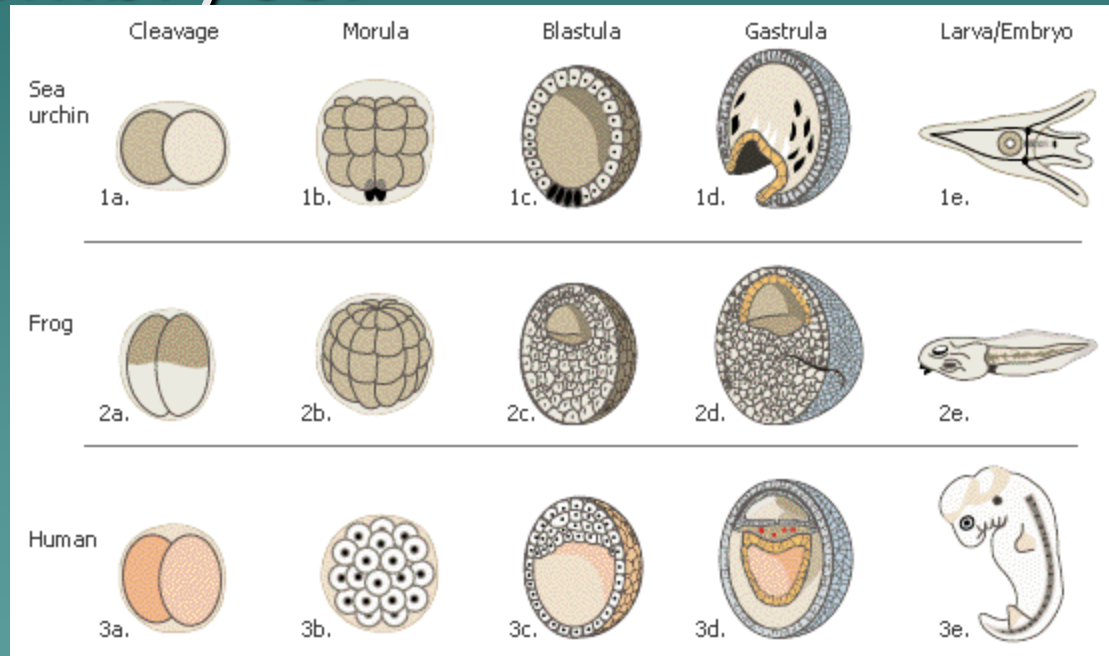


- ◆ Analogous Structures: Similar structures not inherited from a common ancestor.



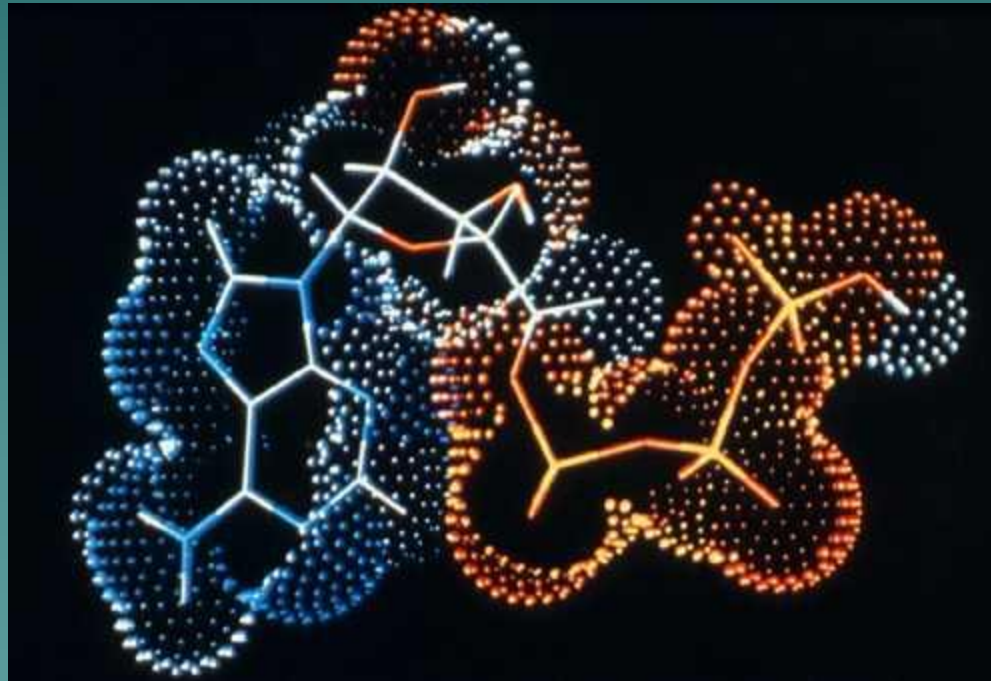
Comparative Embryology:

- ◆ many different animals look similar as embryos.



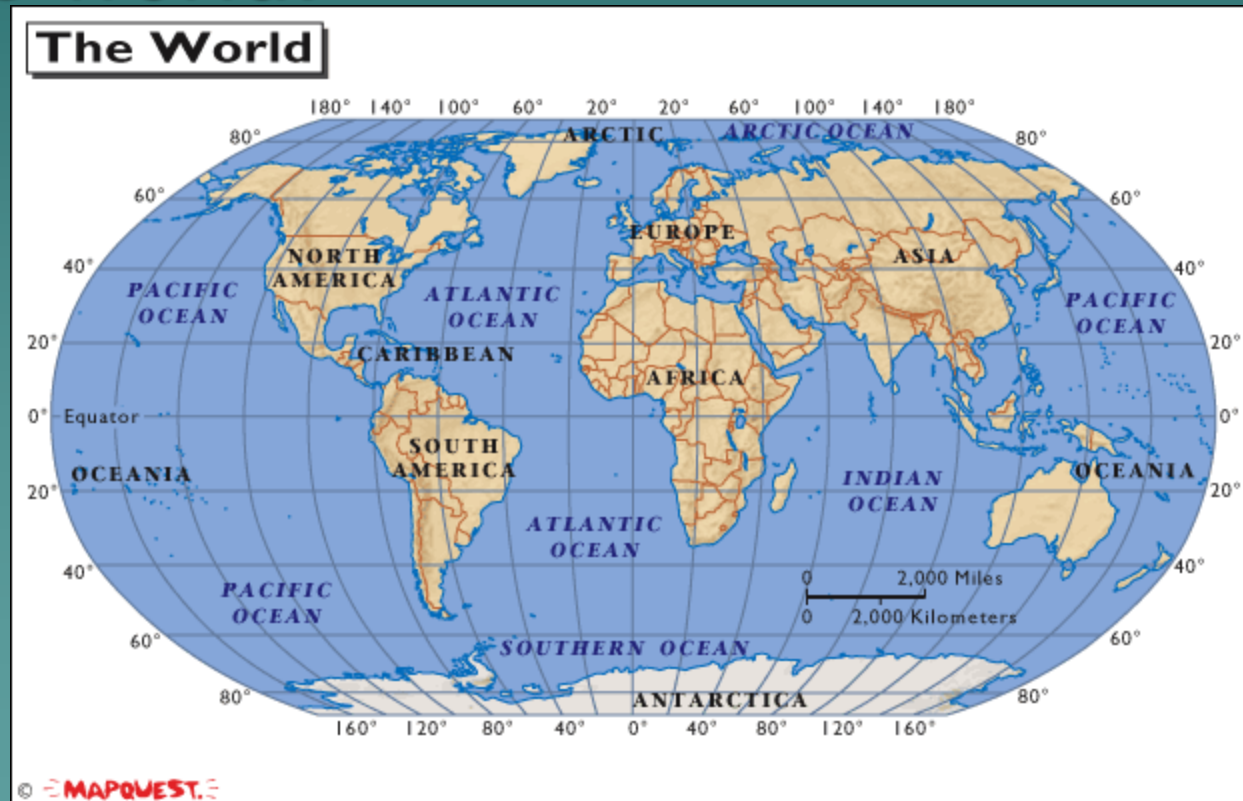
Comparative Biochemistry

- ◆ Common metabolic molecules



Geographic Distribution:

- ◆ Similar species in different parts of the world.



Natural Selection

◆ Adaptation

A trait shaped by natural selection that increases an organism's reproductive success.

- Camouflage: adaptations that allow a species to blend in with their environment.



– Mimicry: One species resembles another species.



– Antimicrobial Resistance: species originally killed by some antibiotics have developed drug resistances.

- ◆ Consequences of Adaptation:
- ◆ Not all are adaptive and do not help the organism.

