

Reproduction



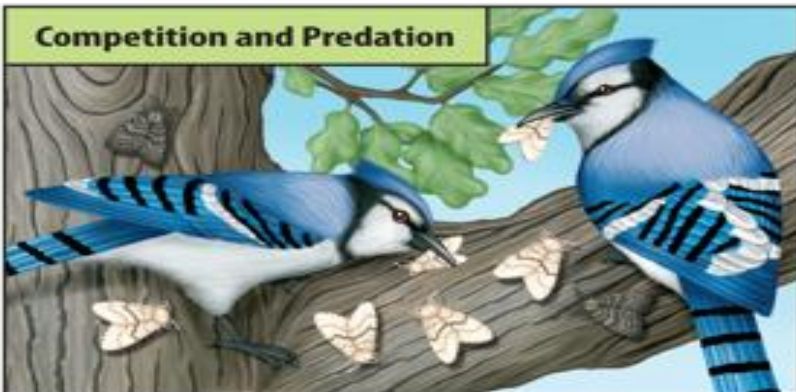
White moths lay many eggs, which develop into caterpillars and then adults.

Variation



A moth might be born with a variation that makes it brown in color.

Competition and Predation



Predators are able to find white moths more easily than brown ones. The brown moths survive to reproduce, while many white moths do not.

Selection

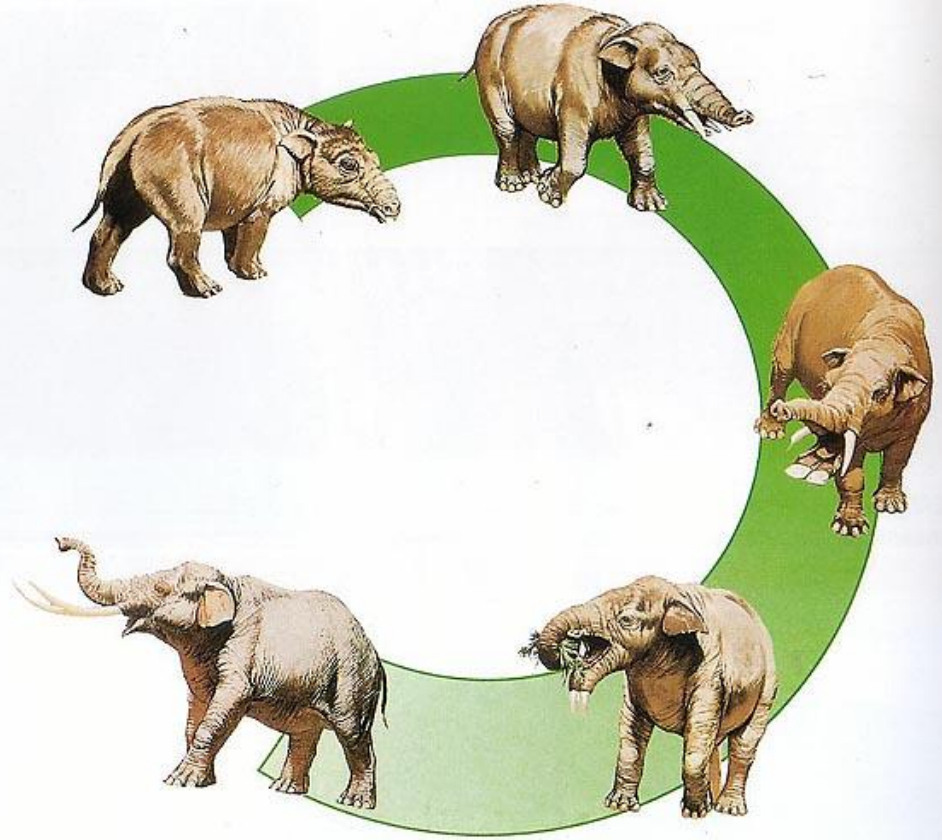


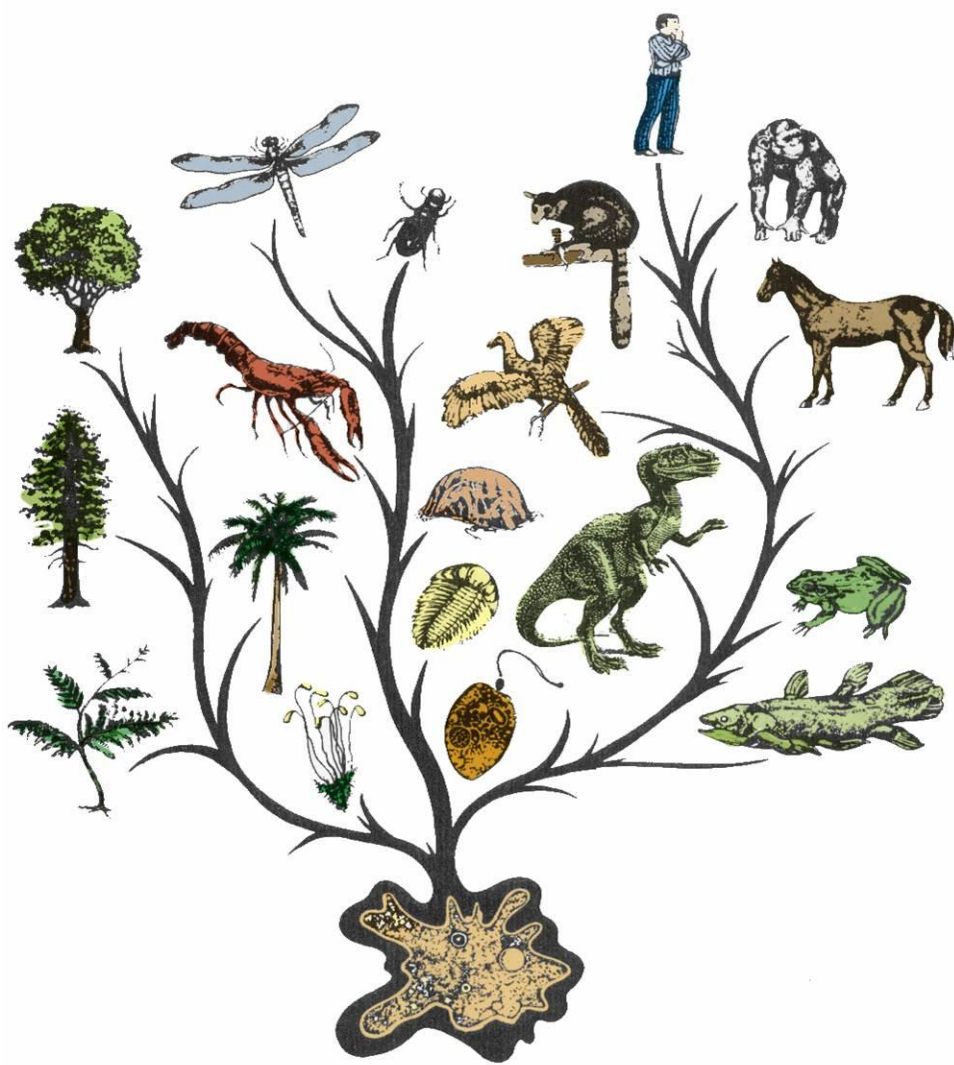
Eventually, moths with brown coloration make up a larger part of the moth population than white moths.

THE PRINCIPLE OF DESCENT WITH MODIFICATION

Over long periods of time, natural selection produces organisms that have different structures and occupy different habitats.

All living species have descended with changes from previous species.



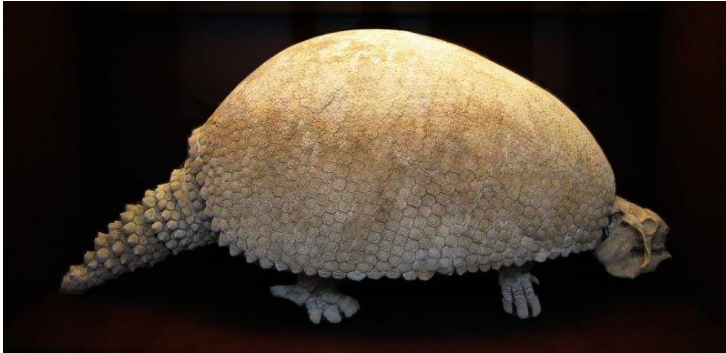


THE PRINCIPLE OF COMMON DESCENT

All species- living
and extinct- were
derived from common
ancestors.

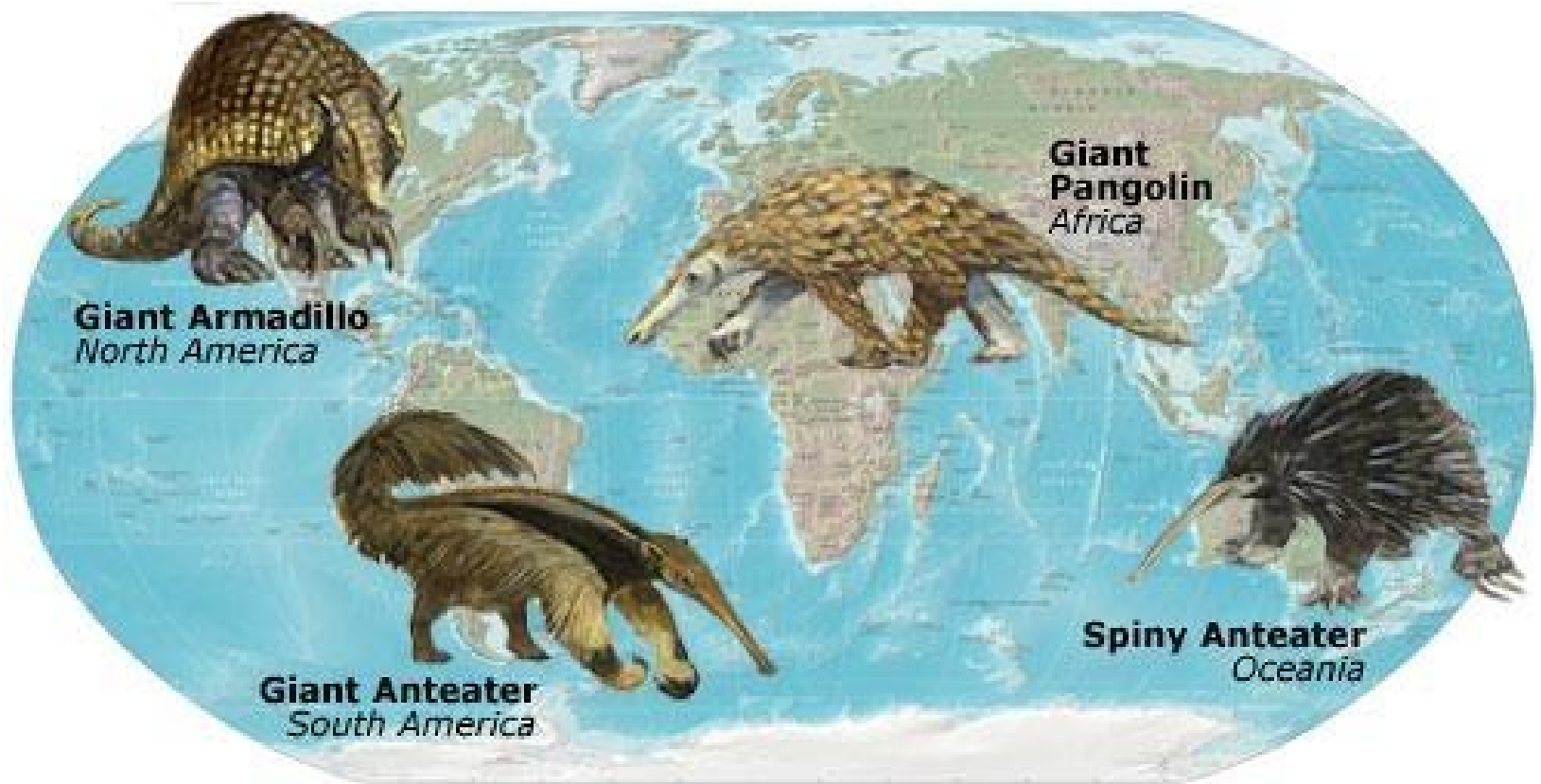
1. Fossil record

fossils of extinct species still resemble some species alive today



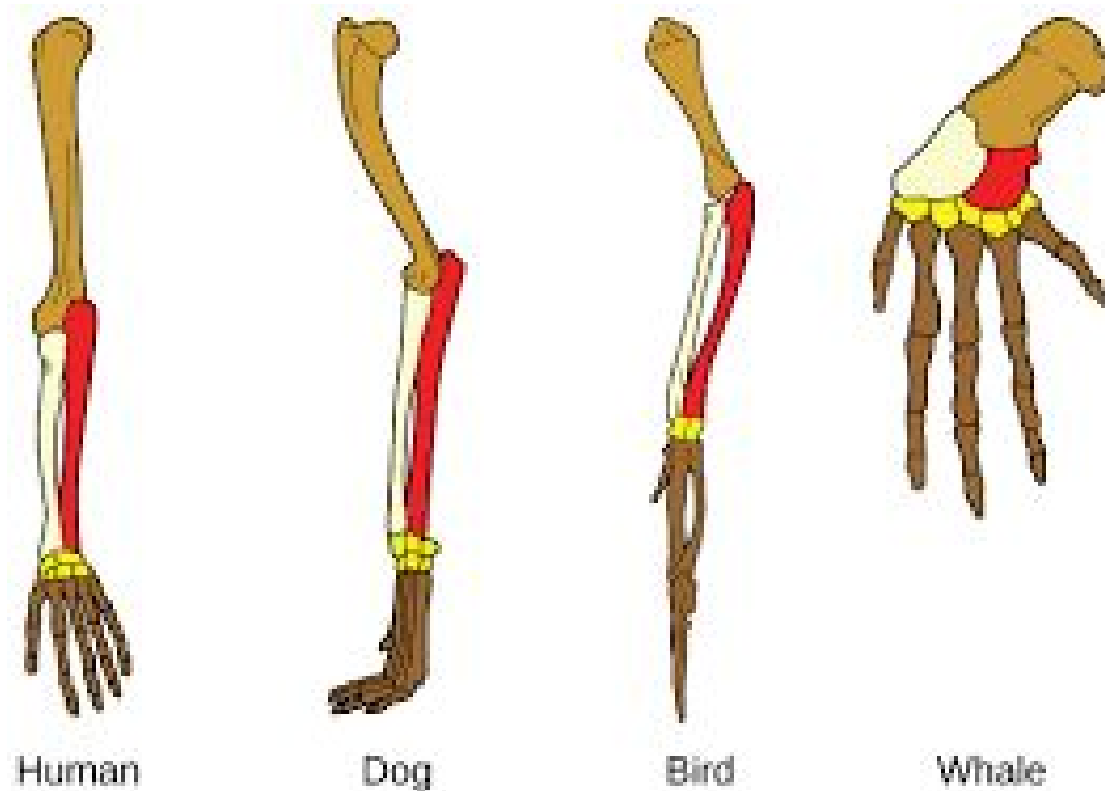
2. Species distribution

similar species living in different regions



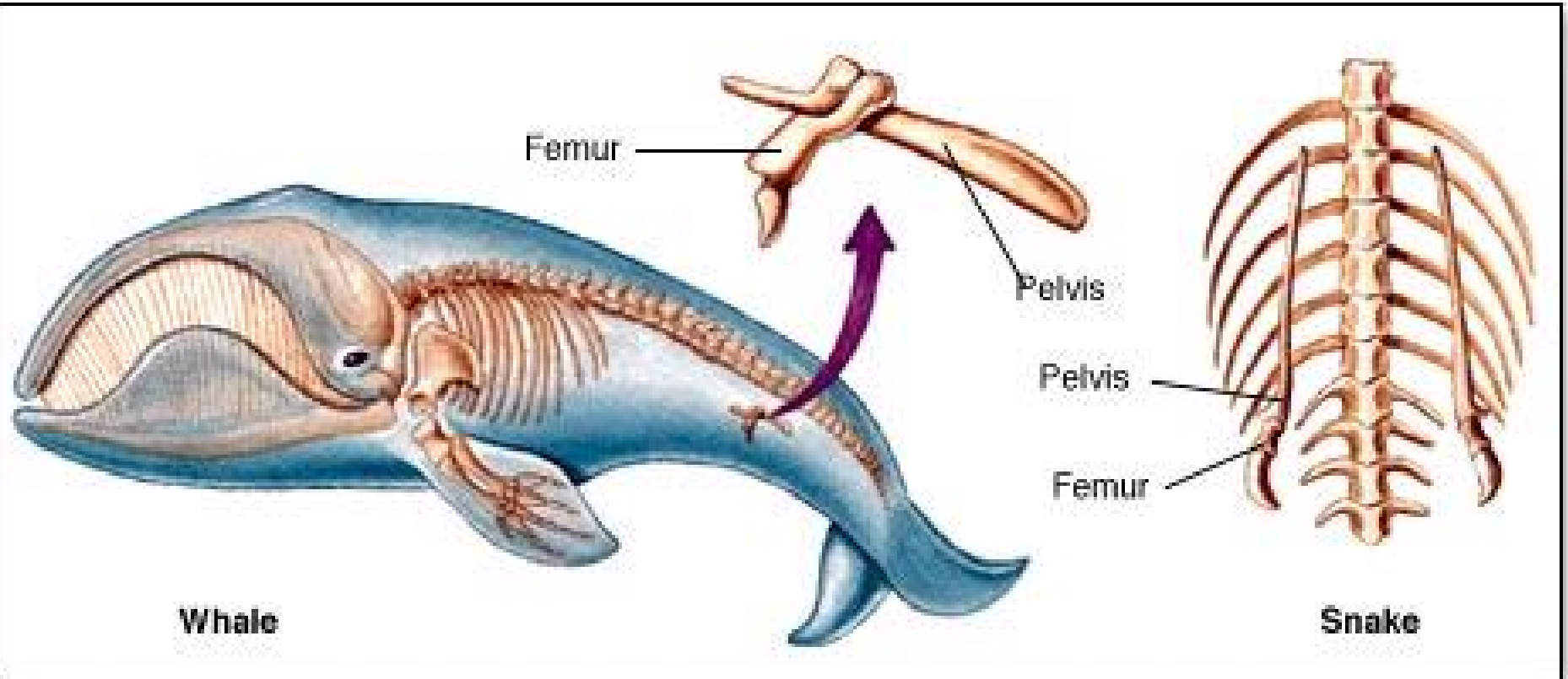
3. Homologous Body Structures

anatomical similarities in different animal groups



4. Vestigial organs

body parts with little or no function





5. Embryology

early stages (embryos) of many vertebrates are similar