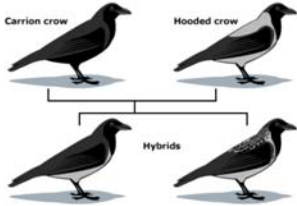
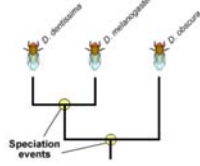


Speciation:

Event that produces two or more separate species



Patterns of Evolution

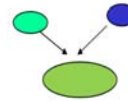
• Adaptive Radiation

- Diversifying rapidly into multiple new forms mostly due to environmental changes; leads to speciation



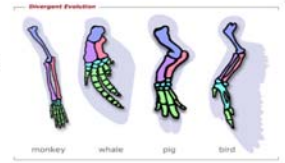
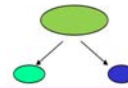
• Convergent Evolution

- Independently evolve similar traits



• Divergent Evolution

- Evolving separately leading to new species



CO-EVOLUTION

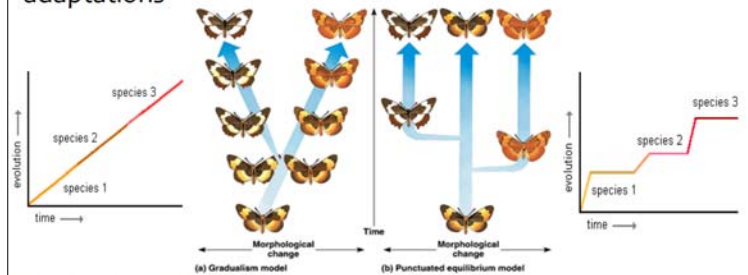
Organisms evolving together



- PREDATOR/PREY
 - PARASITE/HOST
 - COMPETITIVE SPECIES
 - MUTUALISTIC SPECIES
- (2 SPECIES RELYING ON EACH OTHER)

Process of Speciation:

Gradualism: Species originate through gradual change of adaptations



Punctuated Equilibrium: Speciation occurs relatively quickly, in rapid bursts, with long periods of genetic equilibrium in between.

Artificial Selection (aka Selective Breeding)

Breeding organisms for particular traits

