

Evolutionary Patterns and Processes

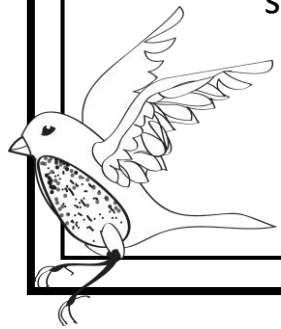
Evolutionary Patterns

Speciation

is the evolutionary process by which populations evolve to become distinct species

Extinction

the elimination of a species



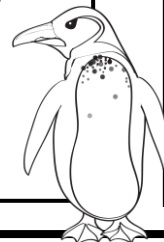
Rate of Evolution

Gradualism

slow, constant changes over a long period of time

Punctuated Equilibrium

bursts of change followed by periods of stability



Macroevolutionary Patterns

Divergent Evolution

when closely related species evolve in different directions, and become increasingly different

Convergent Evolution

when unrelated species evolve similar characteristics because they live in similar environments

Coevolution

occurs when species evolve together