

EQ: What forms
can evolution take?

Evolutionary Patterns

Make the table. Use the notes to fill it out.

Word	Definition	Example
Microevolution		
Macroevolution		
Convergent Evolution		
Divergent Evolution		
Adaptive Radiation		
Coevolution		

Microevolution

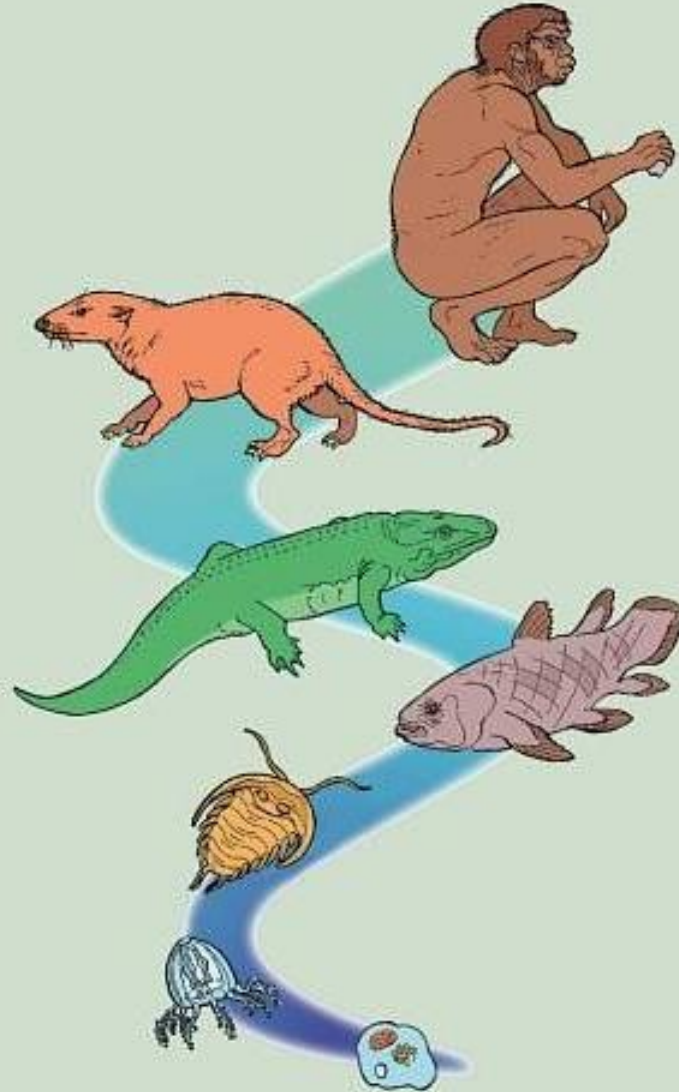
- ◇ Generation to generation
- ◇ Changes in allele frequencies within a population
- ◇ Causes:
 - ◇ Nonrandom mating
 - ◇ Mutations
 - ◇ Genetic drift
 - ◇ Gene flow
 - ◇ Natural selection

Macroevolution

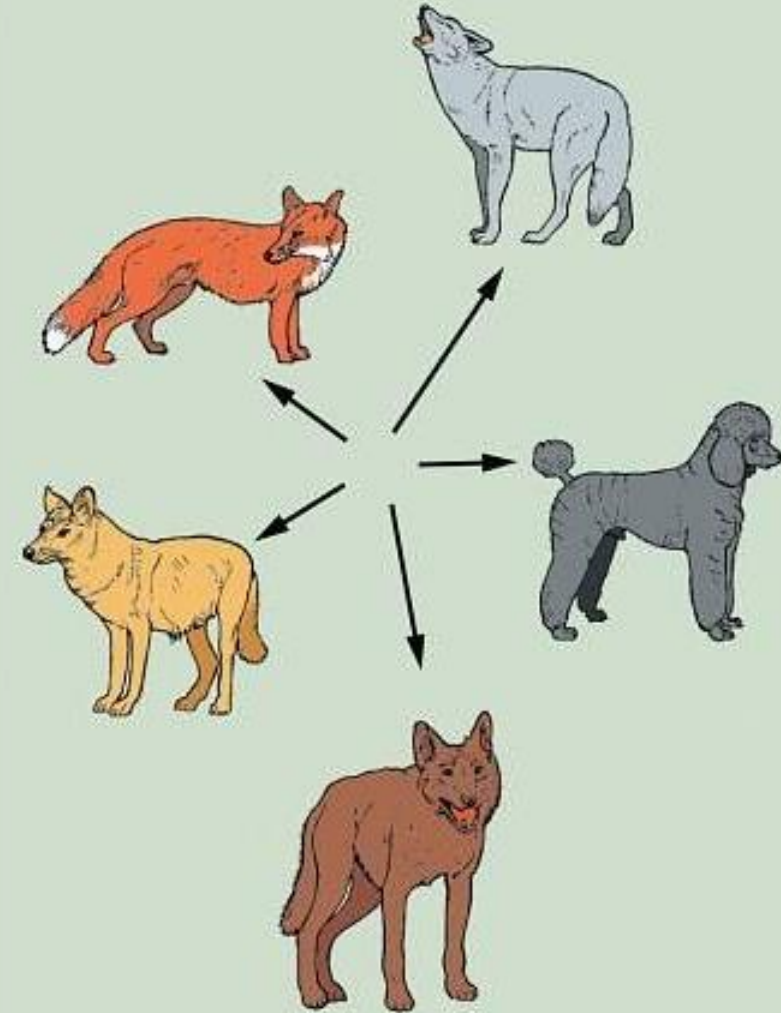
- ◇ Dramatic changes that occur over long time spans in evolution
- ◇ Attempts to explain large phenotypic (physical) changes
- ◇ Important aspects
 - ◇ Speciation
 - ◇ Adaptive radiation
 - ◇ Mass extinction

Microevolution vs Macroevolution

MACROEVOLUTION

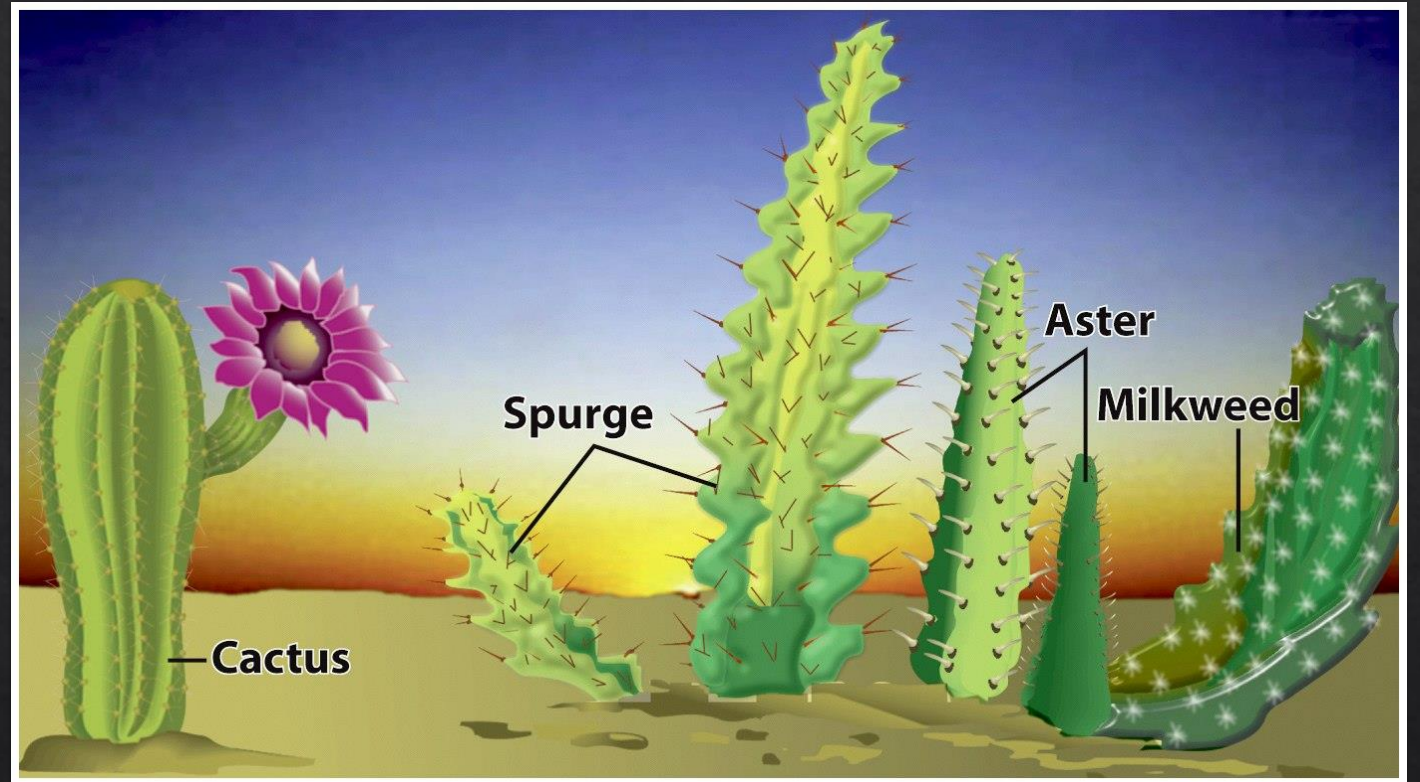


MICROEVOLUTION



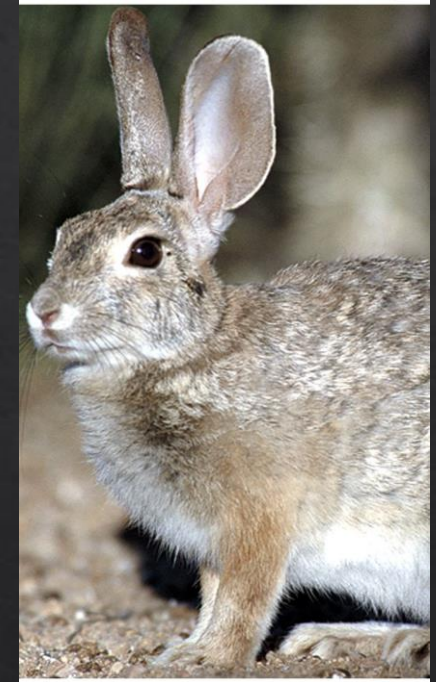
Convergent evolution

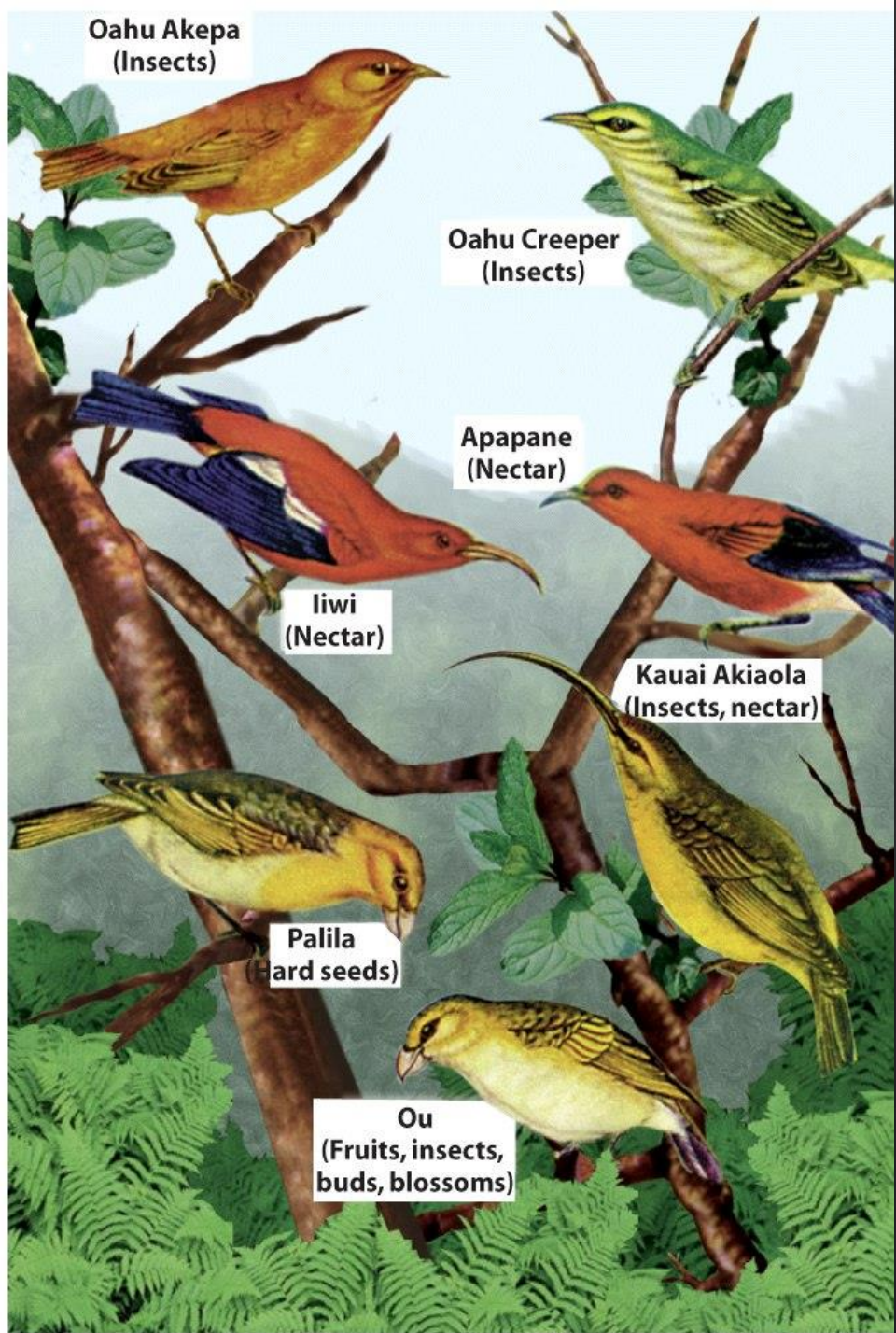
- ◆ Unrelated species living in similar environments and facing similar environmental challenges sometimes evolve similar characteristics.



Divergent evolution

- ◆ Closely related species living in different environments and facing different environmental challenges sometimes evolve dissimilar characteristics.





Adaptive radiation

- ◇ the relatively fast evolution of many species from a single common ancestor
- ◇ generally occurs when when a change in the environment makes new resources available, creates new challenges, or opens new environmental niches
- ◇ Type of divergent evolution

Coevolution

- ◇ Evolution of one species affects the evolution of another species.
 - ◇ As predators evolve, prey evolves.
As prey evolves, predators evolve.

