Speciation

Name _____
Date_____
Block_____

What is speciation?

- process by which _____
- speciation is a result of _____, however evolution does not always result in _____.

Reproductive Isolation

- populations are _____ (most common way that new species are formed)
- occurs when…
  - _____ (i.e. rivers, mountains, roads, etc.) _____
  - there are _____ between populations
  - the _____ of the populations are different
- Recall: A species is a group of organisms that can _____.
- _____ occurs when members of a species…
  - have been separated for an _____
  - can no longer _____ (even when brought back together); resulting in _____ evolving
- permanent reproductive isolation can ONLY happen once the separate _____ become VERY dissimilar

Allopatric Speciation

- speciation that occurs when _____ from one another

example:

_____., result in speciation

Sympatric Speciation

- process of speciation in which a new species develops when members of a population develop a _____that prevents them from reproducing with members of the _____.

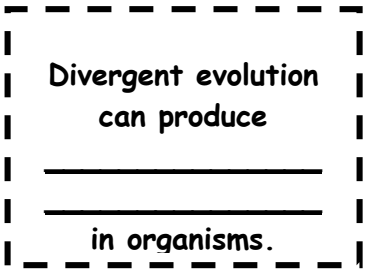
examples:

- differences in _____ result in speciation
- differences in _____ result in speciation

Divergent Evolution

- a number of different species _____ a common ancestor

example:



- scientific example: Darwin's finches

Convergent Evolution

- as a result of evolution, species are produced (from different ancestors) that are _____

example:

Convergent evolution has produced many _____ _____ in organisms.

- scientific example: Dolphins (mammals) and sharks (fishes) have analogous structures due to the environmental selective forces, NOT due to a close evolutionary relationship.