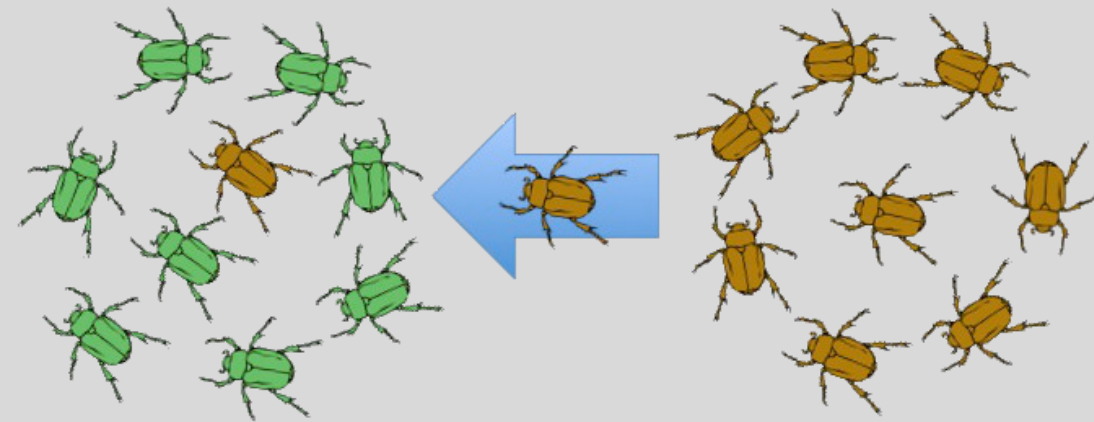


## Gene Flow

The exchange of genes between two separate populations.

Example- If some blue-eyed people from Sweden move to a small town in Mexico where people all have brown eyes. When they mate, some of their children now have blue eyes.



## Natural Selection

Process that results in the adaptation of an organism to its environment by selectively reproducing changes in its genotype

Example- Light-colored peppered moths were no longer well camouflaged on the darkened tree trunks (due to pollution). The dark colored moths, however, were well camouflaged. Because predators were able to spot the light moths more easily, the dark moths were more likely to survive and reproduce



## Mutation

Change that occurs in our DNA sequence, generally due to mistakes when the DNA is copied.

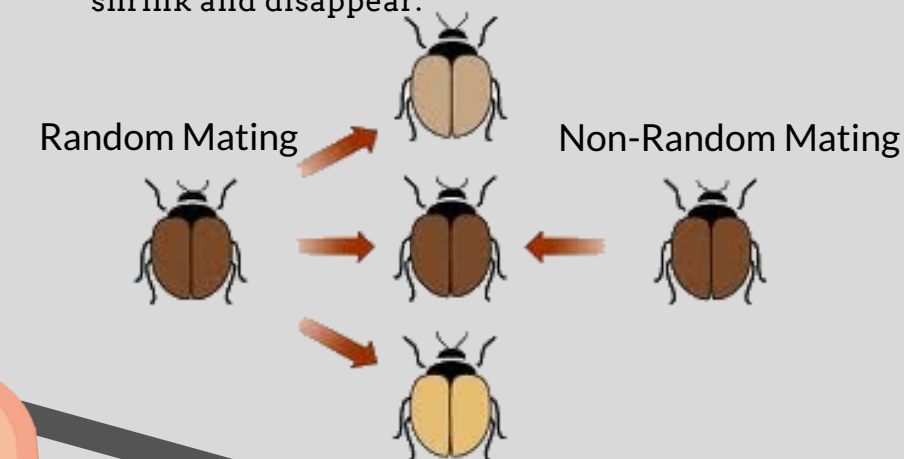
Example- Wild Almonds use to be harmful to humans when consumed. A single gene mutation in wild almond trees resulted in a harmless variety that we eat today.



## Non-Random Mating

If no one mates with a certain gene, frequency of that gene will decrease and slowly disappear.

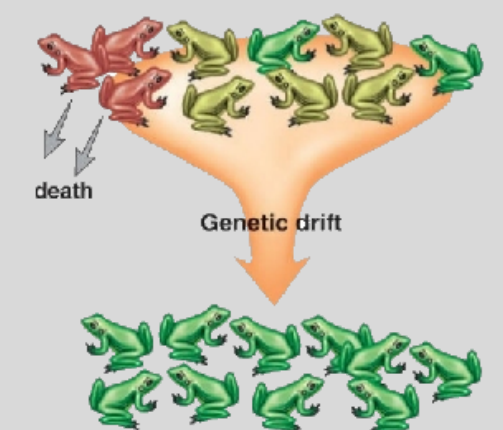
Example- There exists a population of red-hair people. Every other population stops mating with these people. The red-hair population will slowly shrink and disappear.



## Genetic Drift

When chance events cause changes in frequencies of alleles in a population.

American bison were hunted close to extinction in the late 1800s. Though the population is recovering, the rapid decrease in population size has led to a population with very little genetic variability.



# Evolution