## **Genetic Drift**

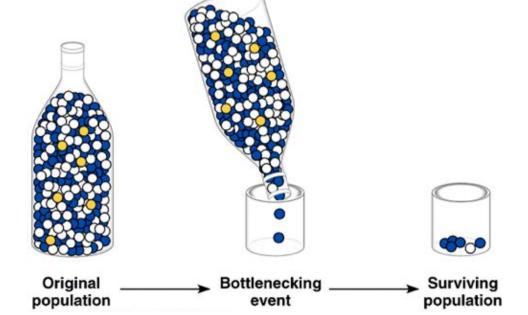
- Genetic drift occurs in small populations when an allele becomes more or less common simply by chance.
- Genetic drift is a random change in allele frequency.
- Genetic drift can result from two scenarios:
  - 1. Bottleneck effect
  - 2. Founder effect

## **Bottleneck Effect**

• The bottleneck effect is a **change in allele frequency** following a dramatic **reduction** in the size of a population.

 For example, a disaster may kill many individuals in a population, and the surviving population's gene pool may contain different allele frequencies from the original gene

pool.



## The Founder Effect

- The founder effect occurs when allele frequencies change as a result of the migration of a small subgroup of a population.
- For example, a small group of beetles from a diverse population migrate to an island and interbreed, producing a new population that differs from the original.

