

-Assortative mating

Phenotypically similar individuals mate

Increases proportion of homozygous individuals

-Disassortative mating

Phenotypically different individuals mate

Produces excess of heterozygotes

Genetic drift

-in small populations, allele frequency may change by chance alone

-magnitude of genetic drift is negatively related to population

-bottleneck effect

-founder's effect

Selection

-Some individuals leave behind more progeny than other, and the rate at which they do so is affected by phenotype and behavior

-Artificial selection

-Natural selection

3 conditions for natural selection to occur and to result in evolutionary change

1 variation must exist among individuals in a population

2

Natural selection and evolution are not the same

-Natural selection is a process

*only one of several processes that can result in evolution

-Evolution is the historical record, or outcome, of change through time

Come sulphur butterfly

-Caterpillar usually pale green