In the original population, there are _____ blue and _____ red.

In the population after the chemical spill there are _____ blue and _____ red.

In the population in later generations, there are _____ and _____ red.
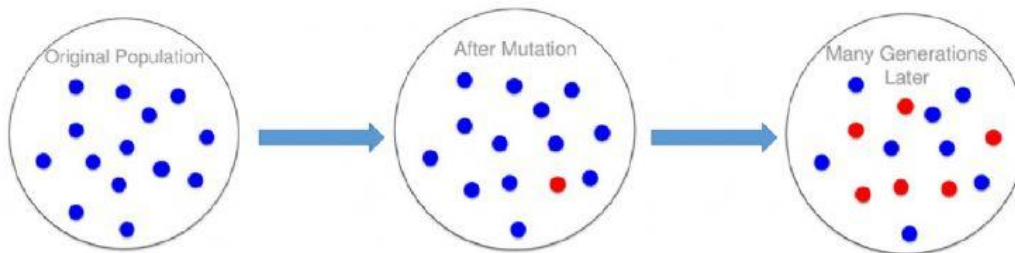
Did the allele frequencies change? _____

Was the effect of the chemical spill on allele frequency random? _____

Which evolutionary mechanism is responsible? _____

After the chemical spill, what evolutionary mechanism was responsible for the change in the allele frequency of the population? _____

In the original population, there are _____ blue and _____ red.

In the population after the mutation there are _____ blue and _____ red.

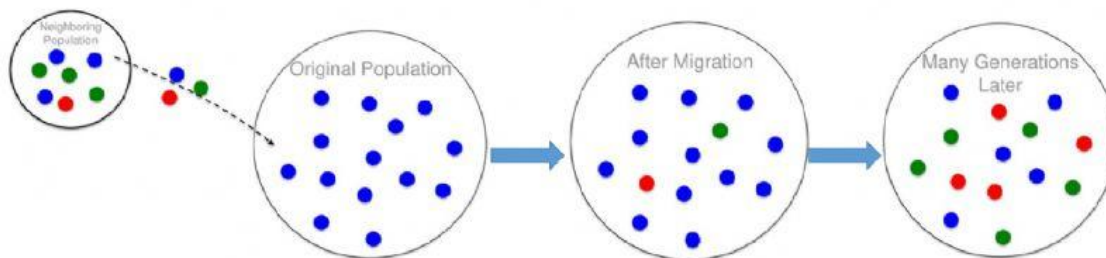In the population in later generations, there are _____ and _____ red.

Did the allele frequencies change? _____

Was the effect of the mutation on allele frequency random? _____

Which evolutionary mechanism is responsible? _____

After the mutation, what evolutionary mechanism was responsible for the change in the allele frequency of the population? _____

In the original population, there are _____ blue and _____ red.

In the population after the migration there are _____ blue, _____ red, and _____ green

In the population in later generations, there are _____ blue, _____ red, and _____ green
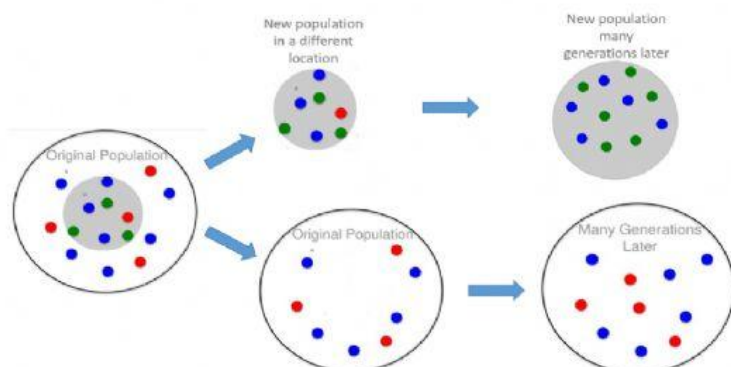
Did the allele frequencies change? _____

Was the effect of the mutation on allele frequency random? _____

Which evolutionary mechanism is responsible? _____

After the migration, what evolutionary mechanism was responsible for the change in the allele frequency of the population? _____

In the original population, there are _____ blue, _____ red, and _____ green.

In the population after the part of the population split, there are _____ blue, _____ red, and _____ green

In the original population in later generations, there are _____ blue, _____ red, and _____ green

In the new population in later generations, there are _____ blue, _____ red, and _____ green

Did the allele frequencies change in the original population? _____ the new population _____?

Was the effect of the split of the gene pool on allele frequency random? _____

Which evolutionary mechanism is responsible? _____

After the gene pool split, what evolutionary mechanism was responsible for the change in the allele frequency of the two populations population? _____

Mutation

Natural selection

Gene flow

Genetic drift –
bottleneck effect

Genetic drift –
founder's effect

- An organism's fitness is determined by the environmental conditions in that habitat.

- Migration of organisms and their alleles in and out of a population.

- A random selection of the individuals in the original population and their alleles relocate to an area where there are no current populations of their species.

- A random change to DNA that results in a new phenotype in the population.

- A random event causes a drastic decrease in the gene pool and the allele frequency of the gene pool.