

## 5 Mechanisms (Causes) of Evolution

Evolution is a change in the ALLELE FREQUENCIES of a Population over time

### 1 Non-Random Mating Recombination:

crossing \_\_\_\_\_ of homologous chromosomes during meiosis creates new genetic combinations

### 2 Gene Flow: movement of \_\_\_\_\_

from one population to another

### 5 Genetic Drift:

random \_\_\_\_\_ in a **gene pool** that occur within a small population due to chance

### 9 Mutations:

random changes to the \_\_\_\_\_ which changes the genotypic and \_\_\_\_\_ ratios in a population

### 13 Natural Selection:

process in which organisms that are \_\_\_\_\_ to their environment survive and produce more offspring

caused by

3

\_\_\_\_\_ :  
movement of organisms from one area to another area

result of

6

**Founder's Effect:**  
occurs when few individuals relocate to a **new location** to live, often a result of \_\_\_\_\_

7

**Bottleneck Effect:**  
occurs when a large number of the population is removed by a random event or \_\_\_\_\_

caused by

10

Errors in \_\_\_\_\_

11

Mutagens from the \_\_\_\_\_

resulting in

12

the introduction of new \_\_\_\_\_ into the gene pool, which **increases** \_\_\_\_\_

regulated by

14

\_\_\_\_\_ :  
an organism's ability to survive and \_\_\_\_\_

which contributes to

15

\_\_\_\_\_ :  
the act of preying on other animals

16

**Competition:**  
Interaction between species over a \_\_\_\_\_, in which the fitness of one species is lowered by the presence of another

4  
\_\_\_\_\_ :  
Organisms move **IN** an area  
\_\_\_\_\_ :  
Organisms move **OUT** of an area

which

8

\_\_\_\_\_ the amount of genetic variation within the new population