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| **Mechanisms of Evolution** | Date: |
|  | Per: |
| Evolution is | For Darwin (1859): is a gradual change for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ traits in a population across generations, eventually generating \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ over time.For the Modern Evolutionary Synthesis(early 20th century) -is a change in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ frequency over time. |
| Population Genetic Terms1. Population
2. Species
3. Gene Pool
4. Allele
5. Homozygous
6. Heterozygous
 | alternate form of a geneidentical alleles for a given trait(dom or rec)>1 diff alleles for a given trait. |
| **Genetic Diversity:***Sources of diversity* | 1. These are the 2. \_\_\_\_ main 3. of Evolution4. 5.6. All can \_\_\_\_\_\_\_\_\_\_\_\_\_\_ a change in allele frequency but to be evolution the change must be in the \_\_\_\_\_\_\_\_\_. |
| 1. **Natural Selection**

(Survival or the \_\_\_\_\_\_\_\_\_\_)*Produces change in population like:* | 1. Adaptation
2. Behavior
3. Extinction
4. Speciation
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| 1. **Genetic Drift**

The founder effect:bottleneck effect: | -\_\_\_\_\_\_\_\_\_\_ change in allele frequencies from generation to generation-also called \_\_\_\_\_\_\_\_\_\_\_\_ error or \_\_\_\_\_\_\_\_ luckwhen a \_\_\_\_\_\_\_ individuals immigrate to a new area and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a new \_\_\_\_\_\_\_\_\_\_\_\_\_\_The smaller the new population the more likely the \_\_\_\_\_\_\_\_\_\_ frequencies will differ from the \_\_\_\_\_\_\_\_populationsudden \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the number of alleles in a population.-causes \_\_\_\_\_\_\_\_\_\_\_\_\_ in allele frequencies. |
| 1. **Gene Flow**
 | -\_\_\_\_\_\_\_\_\_\_\_\_\_of alleles from one population to another. -Occurs when individuals \_\_\_\_\_\_\_\_\_\_ one population, join another and \_\_\_\_\_\_\_\_\_\_\_. Ex: \_\_\_\_\_\_\_\_\_\_\_-Gene flow can also be called gene \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Ex:  |
| 1. **Genetic Recombination**
 | : \_\_\_\_\_\_\_ genes and \_\_\_\_\_\_ organisms can created thru genetic recombination-\_\_\_\_\_\_\_\_\_\_\_\_\_\_: crossing over-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ assortment-Polyploidy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **5. Mutations** | -Most evolutionary forces (selection, drift, gene flow) cause a \_\_\_\_\_\_\_\_\_\_\_\_ of diversity over time. -Mutations \_\_\_\_\_\_\_\_\_ the genetic diversity.  |
| **6.SexualReproduction** | * Mating changes allelic frequencies these ways:
1. Inbreeding
2. Sexual Selection
3. Artificial Selection
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