Vocabulary Terms: Evolution of Populations **NAME**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 13.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Situation in which allele frequencies remain constant;Mathematical equation to study changes in allele frequency called Hardy-Weinbergequation | Conditions:1.2.3.4.5. | Change in a kind of organism over time; Occurs in a population over many generations but not in individuals |  4 modes:1.2.3.4. |   1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 14.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Formation of a new species | Two main forms:1.Physical barrier between populations2. Populations are separated for reasons other than physical barrier | Inherited characteristic that increases an organism’s chance of survival; alter traits to affect fitness.Result of natural selection—can include physical traits or even intangible like lifespan | https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTwWOXYs3MPE1K_TolEqpsh-QPHYz8bRxfT1GpEQ-g1B7-lnuh6Ow |  2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 15.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Separation of species or populations so that they cannot interbreed and reproduce fertile offspring | Types:1.i.e courtship rituals, bird songs2.i.e river, mountain3.i.e. seasonal, nocturnal vs. diurnal | Modification in structure form and function in an organism, differs from other organisms in same species; population must exhibit differences in phenotypes in individuals | Causes:1.Any change in DNA sequence2. Such as crossing over or independent assortment in gamete formation |  3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Hypothetical example of speciation:Darwin’s finches | Draw flow chart showing 5 steps: (use book) | Process by which individuals that are better suited to their environment survive and reproduce most successfully; survival of fittest. Can affect single gene traits i.e. widow’s peak, or polygenic traits i.e. height | Conditions:1.2.Has to be able to be inherited; if not then it cannot be selected for or against3. |  4.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 5.\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ | Consists of all genes (including all alleles or gene forms) present in a population | https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcSF3G3LYQxyWhIDHBIB4ISqve_wXchtgeuHse4LMUFfalo0Zd0f | Form of natural selection where single distribution curve splits into two; occurs when individuals at upper and lower ends of the curve have higher fitness than individuals near the middle; Extremes do better than more common forms | C:\Documents and Settings\Teacher\My Documents\My Pictures\untitled.bmp |  9.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 6.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Number of times an allele occurs in a gene pool compared with the number of times other alleles occur.Evolution is any change in the relative frequency of alleles in a population | https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcR-y_Y4mUi3wkyL5Sy21LWc0PfzBRqqJ3CrNsMJ-kvMgZu7sOR- | Random change in allele frequencies that occur in small populations | https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQ6Cz2JiNw9F-ESQYblDpANhRIfkU8fpa_cmj_a4tRHkjZqlSvO |  10.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 7.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Form of natural selectionWhere entire distribution curve moves; occurs when individuals at one end of curve have higher fitness than individuals in the middle or other end of curve. | C:\Documents and Settings\Teacher\My Documents\My Pictures\untitled1.bmp | Change in allele frequencies as a result of the migration of a small subgroup of a population; this is a special case of genetic drift | https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTDKweoQCBqfdgW91BGj3vyFAJQbVHhQ-c_uWYLyYuPQcHRIywK |  11.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 8.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Form of natural selection when center of distribution curve remains in its current position; occurs when individuals near center of the curve have higher fitness than individuals at the ends. | http://img.sparknotes.com/figures/A/a3aa6bb95c7d70781cc0089d17f9160f/stable.gif | Change in allele frequencies as genes from one population are incorporated into (joined with) another.Have to be able to inter breed. | https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcQXbtRlM9pvbtaVvRS_Uw296R9YktA458pWJcw1_vuHLp10M5XuTw |  12.\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ |