

Evolution Key Terms

Term	Definition
Evolution	Change in a population over time
Adaptive value	A favorable trait that increases the chances of survival in a population in a current environment
Variation (genetic)	Differences in genes within a population. Some variations may be considered a favorable trait in a current environment. Variation in a population increases the chances of survival of a species as at least some members may have the favorable trait, survive and reproduce.
Mutation	A change in DNA, that may result in the appearance of a favorable trait
Natural selection (mention and describe the four parts)	Overproduction- more offspring are produced than can possibly survive Struggle for Survival- members of population compete for limited resources Variation- some members of the population will have the favorable trait, while others will not Survival of the Fittest- those with the favorable traits are more likely to survive, reproduce and pass the trait on
Homologous Structures	These structures such as bones are similar in structure, but may differ in function. These structures developed from similar tissue during development. (bones of a bat wing and bones of a human arm)
Resistance	A genetic trait that enables the organisms that possess it to not be effected by a selecting agent (those with the antibiotic resistant trait can survive exposure to the

	antibiotic, while those without the trait most likely cannot)
Comparative Embryology	Examining similarities and differences between the embryos of two or more different species- the more similar for they are for the most number of stages, the more likely they share a recent common ancestor
Comparative Biochemistry	Examining similarities and differences between chemical compounds such as DNA, found in living things- the more similar, the more likely they share a recent common ancestor
Geographic Isolation	A physical barrier divides a population into two or more groups such as a mountain range or a highway. If the environments on each side are different for many generations, this could result in the formation of new species.
Reproductive Isolation	When two groups can no longer reproduce and have fertile offspring (children that can have children of their own) they are said to be two different species
Speciation	The creation of new species from an original population

