**Evolution (15 terms) Biology Keystone Vocabulary**

**Allele –** an alternative form of a gene, variation of a trait (ex. Flower color: purple allele, white allele)

**Analogous structure** – a body part found in many species that is similar in function but different in structure (ex. Wings of butterfly and wings of a bird)

**Embryology –** branch of zoology that studies the early development of living things

**Fossils** – preserved remains or traces of organisms that once lived on Earth

**Founder Effect** – a decrease in genetic variation caused when a new population forms from a small number of individuals

**Genetic Drift** – change in allele (trait) frequency of a population as a result of chance events (rather than natural selection)

**Gradualism** – proposed explanation that says new species arise as the result of genetic mutations that change a trait over many generations

**Homologous Structure –** body part that is similar in structure on different organisms but performs different functions (ex. Bones in forelimbs of vertebrates)

**Isolating Mechanisms** – behaviors, difference in body structures, or genetics that prevent two different species from breeding

**Migration (genetic) –** permanent movement of genes into or out of a population resulting in a change in allele (trait) frequencies

**Mutation** – change in the DNA sequence of a chromosome, may result in a new trait, passed on

**Natural Selection** - process in nature where organisms with certain traits are better able to survive and reproduce then others of their species

**Punctuated Equilibrium –** theory that states that speciation occurs suddenly and rapidly followed by long periods of little evolutionary change

**Speciation** - process caused by genetic isolation from a main population resulting a new genetically distinct species

**Vestigial Structure** – remnants of an organ or structure that has lost its original function as a species has changed over time