**Unit 8 Evolution/ Geologic Time Vocabulary**

1. **Evolution** - Change in a kind of organism over time; process by which modern organisms have descended from ancient organisms.
2. **Vestigial Structure** - A structure that is present in an organism but no longer serves its original purpose
3. **Species** - A group of similar organisms that can breed and produce fertile offspring. Same # of chromosomes
4. **Natural Selection** - A process in which individuals that have certain inherited traits tend to survive and reproduce at higher rates than other individuals because of those traits.
5. **Homologous Structure** - Similar structures that related species have inherited from a common ancestor. Same structure, different function
6. **Analogous Structure** - Body parts that share a common function, different structure
7. **Charles Darwin** - 1809-1882 English naturalist and scientist whose theory of evolution through natural selection was first published in 'On The Origin of the Species" in 1859.
8. **Overproduction** - each species produces more offspring than will survive to maturity. ex. Fish
9. **Variation** - Any difference between individuals of the same species.
10. **Extinct** - The disappearance of all members of a species from Earth
11. **Survival of the Fittest** - Process by which individuals that are better suited to their environment survive and reproduce most successfully; also called natural selection
12. **Adaptation** - A trait that helps an organism survive and reproduce
13. **Mutation** - A rare change in the DNA of a gene, ultimately creating genetic diversity.
14. **Embryology** - the study of embryos and their development
15. **Geologist** - a scientist who studies the forces that make and shape planet earth
16. **Fossil** - A trace of an ancient organism that has been preserved in rock.
17. **Superposition** - In an undisturbed sequence of rock layers, oldest on bottom, youngest on top
18. **Unconformity** - gap in the rock layer that is due to erosion or periods without any deposition.
19. **Index Fossils** - distinctive fossil used to compare the relative ages of fossils
20. **Era** - A large division of geologic time
21. **Bedrock** - Rock that makes up Earth's crust; also the solid rock layer beneath the soil
22. **Geologic Time Scale** - A record of the geologic events and life forms in Earth's history.
23. **Punctuated Equilibrium** - Pattern of evolution in which long stable periods are interrupted by brief periods of more rapid change
24. **Gradualism** - The theory that evolution occurs slowly but steadily