**Evolution Vocab**

1. **Adaptation:** a characteristic that improves an individual’s ability to survive and reproduce in a particular environment
2. **Species:** a group of organisms that are closely related and can mate to produce fertile offspring
3. **Evolution:** the process in which inherited characteristics within a population change over generations such that new species sometimes arise
4. **Fossil:** the trace or remains of an organism that lived long ago, most commonly preserved in sedimentary rock
5. **Fossil Record:** a historical sequence of life indicated by fossils found in layers of the Earth’s crust
6. **Charles Darwin:** Father of Evolution, proposed a mechanism for evolution which was natural selection, wrote a book called “Origin of the Species”, sailed around the world making observations of organisms, most known for his work in the Galapagos Islands
7. **Natural Selection:** the process by which individuals that are better adapted to their environment survive and reproduce more successfully than less well adapted individuals do; a theory to explain the mechanism of evolution
8. **Overproduction:** each species produces more offspring that can survive, some will make it to adulthood and some will not
9. **Inherited Variation:** each individual has its own combination of traits similar to, but not identical to its parents
10. **Struggle to Survive:** only some organisms will survive to adulthood due to competition for limited resources such as food, water, space, and mates
11. **Successful Reproduction:** the organisms that are best adapted and have the best traits to survive in their environment are likely to make it to adulthood, reproduce, and have many offspring that survive
12. **Generation Time:** the period between the birth of one generation and the birth of the next generation
13. **Speciation:** the formation of new species as a result of evolution
14. **Competition:** when two or more individuals or populations try to use the same resources such as food, water, shelter, space, or sunlight
15. **Homologous Structures:** a structure (organ or bone) that is derived from a common ancestor and appears in different animals demonstrating commonalities and similarities among different organisms
16. **Cladogram:** a branching diagram showing the relationship between a number of species and at different points shows the common ancestors among organisms