



GRADES 3 & 4 Vocabulary

This list of words can be used along with the *Let's Investigate Sharks* PowerPoint

1. **Adaptation**: Change an organism undergoes in order to survive. The change is maintained over time by natural selection. This is a very slow process. Also, an inherited trait that helps a species survive in its environment.
2. **Apex Predator**: An animal at the top of the food chain with no natural predators. If removed from an ecosystem, can have large cascading effects on many other species within that system.
3. **Ampullae of Lorenzini**: Tiny pores filled with a jelly like substance that can detect electrical fields traveling through the water. There are more of them on the head of the shark (around the snout) than anywhere else.
4. **Biodiversity**: The variety of different species within an ecosystem. Coral reefs are one of the most diverse ecosystems on the planet.
5. **Bycatch**: Certain fish or other animals (dolphin, sea turtles) that are caught unintentionally while fishing for a specific fish species.
6. **Buccal Pumping**: Named the 'buccal' (cheek) muscles used to pull water into the mouth and over the gills.
7. **Classification**: The action or process of grouping animals together according to shared qualities or characteristics.
8. **Cold Blooded**: Animals like reptiles, amphibians, and fish that become hotter and colder, depending on the temperature around them (can not regulate their internal temperature). For most shark species, their body temperature will be the same as the water it is swimming in. Some species like the Great White Shark and Mako sharks can warm parts of their body to be able to swim faster.
9. **Community**: A group of different species in one location that interact with each other.

10. **Conservation:** The protection of plants, animals and their habitats.
11. **Counter Shading:** Countershading is a type of coloration in animals where dorsal side (back) is dark while its ventral side (underside/belly) is light.
12. **Dermal Denticles:** Tiny tooth shaped scales that cover a shark's body (also called placoid scales). They reduced resistance as the shark moves through the water (hydrodynamic), allowing it to swim faster while using less energy.
13. **Ecosystem:** Animals, plants and nonliving things that make up an environment and impact one another.
14. **Endangered Species:** A species that is in danger of becoming extinct if actions are not taken to protect it.
15. **Fish:** These are vertebrates (have backbones) that live in water. They breathe using special organs called gills.
16. **Inherit:** A trait passed from one generation to the next.
17. **Lateral Line:** A row of sensory cells along the side of a shark that allow it to detect vibrations in the water.
18. **Life Cycle:** A series of changes that happen to an organism over the course of its life.
19. **Mammal:** A warm-blooded vertebrate that has hair and nourishes its young with milk produced in mammary glands.
20. **Migration:** Relatively long distance movement of animals from one area to another and then returning to the original area, usually on a seasonal basis. The reason for migration is usually to mate, find food or because of a change in water temperature or climate.
21. **Nictitating Membrane:** A thin membrane similar to our eyelids that sharks have and can use to protect their eyes when attacking prey.
22. **Offspring:** The young of a plant, animal or person.
23. **Population:** All of the individuals of the same species living within a given area.
24. **Species:** A group of similar living things that ranks below the genus in scientific classification and is made up of individuals able to produce offspring with one another.
25. **Trait:** A distinguishing characteristics of an organism
26. **Vertebrate:** An animal with a backbone (spinal cord).

