



## GRADES 5 & 6 Vocabulary

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

1. **Abiotic:** All the non-living things that affect living organisms in the ecosystem.
2. **Adaptation:** Change an organism undergoes in order to survive. The change is maintained over time by natural selection. This is a very slow process.
3. **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.
4. **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.
5. **Bioaccumulation:** The build up of toxic substances (occurring in the environment) within living organisms. (Example: pesticides or mercury)
6. **Biodiversity:** The variety of different species within an ecosystem. Coral reefs are one of the most diverse ecosystems on the planet.
7. **Biome:** Biomes are regions of the world with similar climate (weather, temperature) animals and plants. The marine biome is the largest in the world covering about 71% of the Earth.
8. **Biotic:** All the living things that affect living things in an ecosystem. (Example: plants & animals)
9. **Bycatch:** Certain fish or other animals (dolphin, sea turtles) that are caught unintentionally while fishing for a specific fish species.
10. **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.

11. **Conservation**: The protection of plants, animals and their habitats.

12. **Consumers**: Are animals that cannot make their own food, so they must eat other animals and plants to survive. (Food chain & food pyramid)

Primary: Animals that eat plants.

Secondary: Animals that eat plant-eating animals

Tertiary: Animal that eats secondary consumers.

(Examples: Tigers, wolves and some species of sharks)

13. **Dermal Denticles**: Tiny tooth shaped scales that cover a shark's body (also called placoid scales). They reduce resistance as the shark moves through the water (hydrodynamic), allowing it to swim faster while using less energy.

14. **Ecosystem**: Animals, plants and nonliving things that make up an environment and impact one another.

15. **Ecology**: The science that studies the relationships between groups of living things and their environments.

16. **Endangered Species**: A species that is in danger of becoming extinct if actions are not taken to protect it.

17. **Food Web**: The whole group of interacting food chains in an ecological community.

18. **Hypothesis**: An idea or possible explanation for a question, which is the starting point of all scientific studies.

19. **Lateral Line**: A row of sensory cells along the side of a shark that allow it to detect vibrations in the water.

20. **Life Cycle**: A series of changes that happen to an organism over the course of its life.

21. **Migration**: Relatively long distance movement of animals from one area to another and then returning to the original area, often on a seasonal basis. The reason for migration is usually to mate, find food or because of a change in water temperature or climate.

22. **Mutualism**: A symbiotic relationship where both organisms benefit.

23. **Nictitating Membrane:** A thin membrane similar to our eyelids that sharks have and can use to protect their eyes when attacking prey.
24. **Osmosis:** The process that causes a liquid to pass through the wall of a living cell from an area of low ion concentration to an area of high ion concentration.
25. **Osmoregulation:** (Osmoregulate) The process by which an organism can maintain a constant concentration of water in its body even when the outside environment would normally cause it to lose or gain water.
26. **Photosynthesis:** The process by which plants make their own food. They use carbon dioxide, water and sunlight (energy) to produce sugar (food) and oxygen.
27. **Phytoplankton:** Microscopic organisms that drift on ocean currents and use photosynthesis to make food. They are responsible for producing half of the total amount of oxygen produced by all plant life on Earth.
28. **Plankton:** Microscopic organisms that drift on ocean currents, including photosynthetic organisms.
29. **Population:** All of the individuals of the same species living within a given area.
30. **Primary Production:** The conversion of light or chemical energy into organic matter. Photosynthesis is an example of this.
31. **Producers:** (food chain & food pyramid) Living things that can make their own food. Plants are producers that make food through a process called photosynthesis
32. **Salinity:** The saltiness or dissolved salt content of water or soil.
33. **Shark Finning:** The removal and retention of *shark fins* while the remainder of the living shark is discarded in the ocean.
34. **Symbiosis:** (Symbiotic) A relationship between two different kinds of living things that live together and depend on each other.
35. **Threatened Species:** A species that is at risk of becoming endangered in the near future if conservation efforts are not made.