Self-Guided Tour
Elementary - Adaptations

Science TEKS

1st Grade – 1.2 A-E, 1.9 A-C, 1.10 A
2nd Grade – 2.2 A-E, 2.9 C, 2.10 A
3rd Grade – 3.2 B, C, D & F, 3.9 A
4th Grade – 4.2 B, C, D & F, 4.10 A
5th Grade – 5.2 C, D, F & G, 5.9 A & C, 5.10 A

Vocabulary

Adaptation - any alteration in the structure or function of an organism allowing it to survive and multiply in its environment
Habitat - the environment in which an animal or plant normally lives or grows
Camouflage - the act, means, or result of blending in to an organism’s habitat
Fin - a winglike appendage used for propulsion, steering, or balancing
Mammal - having the body more or less covered with hair, nourishing the young with milk, and giving birth to live young
Vertebrate - animals having a backbone or spinal column
Invertebrate - animals without a backbone

Definitions based on dictionary.com

Guiding Questions and Activities

• Find a fish that is moving quickly (or slowly) and time the fish over a desired distance. Use nontraditional measurements or estimation for distance, or bring measuring tapes with you. What fins are the fish using? Draw or describe the shape of the fin that creates the movement.

• In what habitat do you find the most or least colorful fish? List the most common colors that you see. Identify different types of coloring, patterns or camouflage on fish that are hiding or blend in with their habitats. What about the fishes that are not hiding?

• How many different types of body coverings can you find in: a) any particular habitat, b) all the Aquarium habitats? How do the invertebrates protect themselves?

• Observe the presence or absence of scales on a variety of animals. Are reptile, bird, and/or fish scales all the same?

• Describe some of the differences that you notice between the animals on land and in the water.

• Use common shapes to describe the feet, limbs, mouths, fins and/or bills that you see on the animals. Find as many as you can!

• Touch an animal! Describe what the jellies, sharks, stingrays, and/or invertebrates feel like. Compare and contrast their different textures.

• Identify a marine mammal. List some of the ways that marine mammals differ from fish. How do the marine mammals differ from other mammals at the Aquarium?

Check texasstateaquarium.org for unique professional development opportunities!
Follow-Up at School

Discuss your experiences and observations of animals and plants at the Aquarium.

- Choose two animals from very different habitats, e.g. flamingo and dolphin. Discuss the animals’ adaptations for life in specific environments.

- Have your students get creative by designing their own animal! They can work alone or in small groups. Students should draw their animal, its adaptations, and the habitat it lives in. Have students present their creation to the class.

- Transform your classroom into a habitat you observed at the aquarium by using recycled materials.

Our Favorite Resources

Use these great online resources to support your Aquarium adventure.

- Carribbean Reef and other collections, curricula, and memory games
  [http://eol.org/discover](http://eol.org/discover)

- How Science Works
  [understandingscience.org](http://understandingscience.org)

- Build an Octopus Chromatophore – simple hands-on camouflage activity

- Use animals to inspire design – engineering and animal adaptations
  [https://www.teachengineering.org/activities/view/cub_bio_lesson05_activity1](https://www.teachengineering.org/activities/view/cub_bio_lesson05_activity1)

- Texas Aquatic Science Curriculum

- Ocean Today video collections
  [http://oceantoday.noaa.gov/](http://oceantoday.noaa.gov/)

- AZA SAFE -- Saving Animals From Extinction
  [https://www.aza.org/aza-safe](https://www.aza.org/aza-safe)

- OCEARCH – tracking sharks in Real Time

- Tracking sea turtles