

Welcome to the Tennessee Aquarium! We hope you enjoy your visit today. To search for answers to the following questions, carefully read the information found on signs throughout the galleries and look closely at the animals and their exhibits. You'll be surprised what you can learn from observation – you might learn where an animal lives, how it eats or how it protects itself. Good luck, and have fun exploring the Tennessee Aquarium!

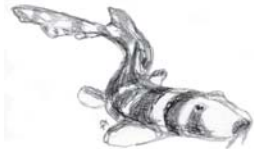
### Ocean Journey

#### Tropical Cove

1. The hyacinth macaws have very specialized beaks and feet. Observe them and describe how they move from limb to limb. \_\_\_\_\_  
\_\_\_\_\_

2. Touch the sharks at Shark Island. What do they feel like? \_\_\_\_\_  
\_\_\_\_\_

**FUN FACT**



Sharks have tiny teeth all over their skin called dermal denticles.

#### Butterfly Garden

3. Butterflies are very colorful. One butterfly, the blue morpho, has a bright blue pattern with wings open and a brown pattern with wings closed. Why do you think this is helpful for this butterfly to have two different colors? \_\_\_\_\_  
\_\_\_\_\_

4. Name two food sources for the butterflies that you see in this exhibit.  
\_\_\_\_\_  
\_\_\_\_\_



#### Penguins' Rock

5. What materials do Gentoo penguins use to build their nests?  
\_\_\_\_\_

6. Macaroni penguins take great care of their young. One parent spends the first month caring for the newly hatched chick while the other one gets food. Complete the sentences to explain who does what.

The father penguin \_\_\_\_\_

The mother penguin \_\_\_\_\_

7. Where do Emperor penguins keep their young after they hatch?

- a. in their pouch
- b. under their wings
- c. on their feet
- d. in the nest



**WOW!**

Adult penguins are able to identify their young by the chick's distinctive call.

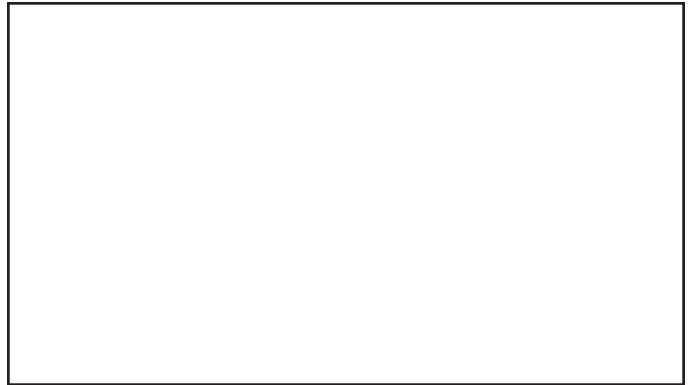
## Secret Reef

8. The sand tiger sharks in the Secret Reef exhibit have lots of sharp teeth. Why do you think sharks have so many rows of teeth?

\_\_\_\_\_



9. There are many different species of fish in the Secret Reef exhibit. Write the name of one and draw it. \_\_\_\_\_



### FUN FACT

Sharks' skeletons are made up of cartilage instead of bone.

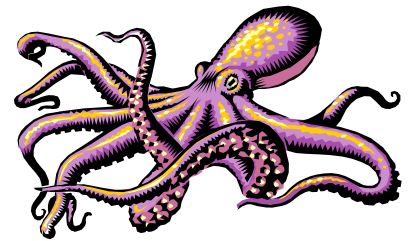
## Boneless Beauties

10. The giant Pacific octopus is a very intelligent animal. The aquarists give them things to play with to keep them active. Find one of their toys and list it below.

\_\_\_\_\_

11. What are jellyfish mostly made of?

- a. jelly
- b. water
- c. peanut butter
- d. air

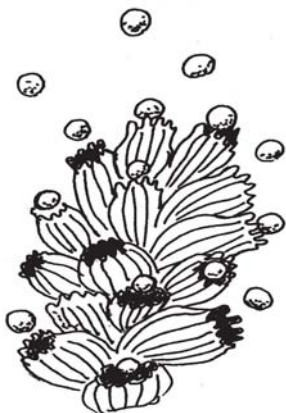


### WOW!

The giant Pacific octopus has the learning ability of a three year old!

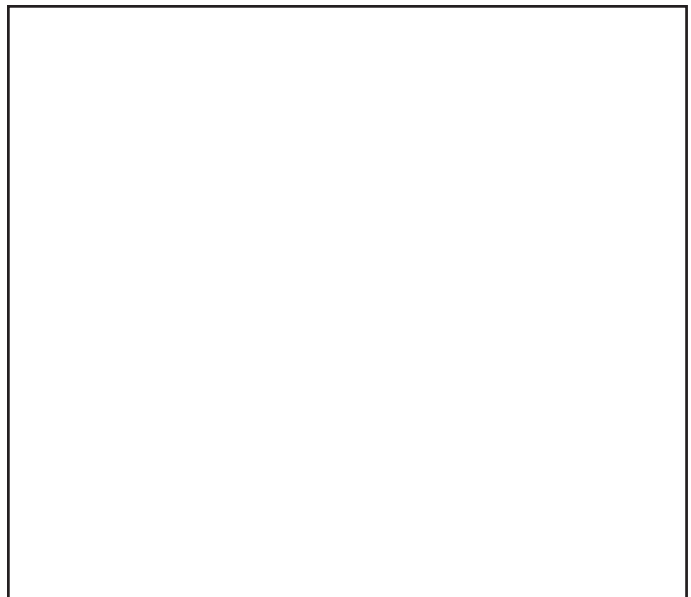
## Undersea Cavern

Coral reefs provide food and shelter for many species of fish. Look for one among the coral and draw it.



### FUN FACT

Every full moon of August, the coral reefs of the Flower Garden Banks National Marine Sanctuary spawn at the same time. This is how they reproduce.



# River Journey

## Seahorse Gallery

Seahorses, pipefish and seadragons are all fish but they sure do look different! Stop by our interactive area to learn what makes seahorses special.

12. Take a close look at a seahorse. How many fins do you see?
- a. 5
  - b. 3
  - c. 0
  - d. 4



13. Which is the smallest species of seahorse at the Aquarium?
- \_\_\_\_\_

**WOW!**

Seahorses have very unique eyes that can move in two directions at one time. This makes it easier to spot dangerous predators.

## Cove Forest

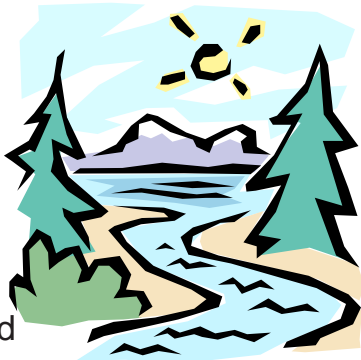
Live trees and cool, fast-moving streams make you feel like you are in a forest high in the mountains. Look closely and you might see a bird flying overhead or singing on a branch.

14. Stop and look at the snakes in the snake exhibit (first exhibit on your right). How do you think the timber rattlesnake might protect itself?
- \_\_\_\_\_
- \_\_\_\_\_

15. List two adaptations that help the otter swim.
- \_\_\_\_\_
- \_\_\_\_\_

### FUN FACT

The word Tennessee originates from the Native American word for river, Tanasi.



## Discovery Hall

Explore wetlands, estuaries and other watery habitats in Discovery Hall.

16. Female alligators have great parenting skills. (Circle one)  
True or False
17. Treefrogs are excellent climbers. Look closely at their feet. How might their feet help them climb?
- \_\_\_\_\_
18. In 1989 the last golden toad was seen in the jungles of Costa Rica. It is now extinct. (Circle One)  
TRUE or FALSE
19. Touch one of the sturgeon carefully. What does it feel like?
- \_\_\_\_\_



### FUN FACT

As adults, sturgeons do not have teeth in the front of their mouths; instead, they are located in their throats. Their mouths work like a vacuum to suck food from the river bottom.

## Delta Swamp

A cypress swamp makes a great home for many unusual plants and animals. Swamps act as nature's sponges by absorbing excess water and preventing floods.

20. Look at an alligator closely. List two adaptations that help it to hunt when it is in the water.

1. \_\_\_\_\_ 2. \_\_\_\_\_

21. Male ducks are brightly colored to attract a mate. Female ducks are dull to help them blend in with grasses along the shoreline where they raise their babies.

Find a duck. Is it male or female? \_\_\_\_\_

### FUN FACT

Alligator snapping turtles lure their prey into their mouths using a part of their tongue that looks like a worm.



## Gulf of Mexico

Water from the Tennessee River eventually flows into the Gulf of Mexico. The mangrove roots provide shelter for smaller fish while the open ocean provides plenty of room for larger fish to swim.

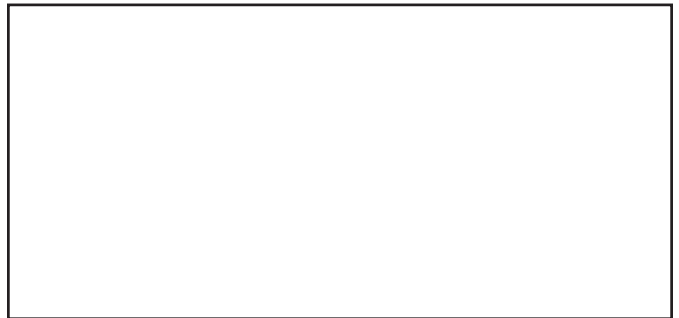
22. Where do green sea turtles get their name?

\_\_\_\_\_

Does the green sea turtle in this exhibit look green on the outside?

\_\_\_\_\_

23. Many fish have stripes or bars to help them hide among roots and plants. This is called disruptive coloration. Find a fish that has stripes or bars and draw it.



### FUN FACT

There are over 300 species of sharks. Less than two dozen of these are considered "dangerous" to humans.

## Rivers of the World

Rivers are very important to the people, plants and animals that live around them. All rivers carry freshwater; however, they can be very different. Take a look around this gallery and explore the diversity of river life.

24. Can you find the snakes in the Amazon exhibits (the first two exhibits on your left)?

Name them.

Why were they difficult to find?

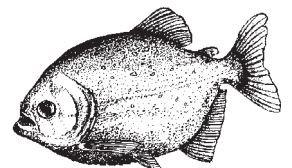
\_\_\_\_\_

25. Look at the Surinam toads. What are they camouflaged to look like?

\_\_\_\_\_

### FUN FACT

Piranha are not always the dangerous fish they are made out to be. When they have plenty of food to eat, they are calm. Native people of the Amazon swim during the rainy season with no fear of being bitten.



## Turtle Gallery

Turtles are found in many different habitats all over the world. As you explore this gallery, look at the many shapes and colors of their shells.

26. How do the pancake tortoise and the star tortoise protect themselves?

\_\_\_\_\_

**WOW!**

Mata matas are so slow moving that algae and moss grow on their backs.

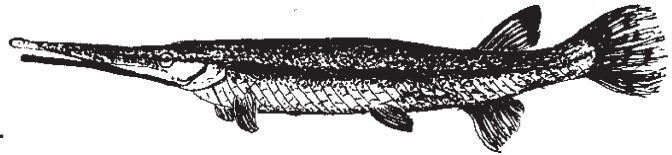


## Tennessee River

As you wander through the Tennessee River gallery, you'll get a closer look at some of the lesser known plants and animals found in and around eastern Tennessee lakes and rivers.

27. Carp, suckers and catfish have flattened heads and mouths that point downward. Watch them closely. Where do you think they normally eat?

- Near the surface of the water.
- On the river bottom.
- Around the middle of the river.
- They jump out of the water to catch their prey.



**FUN FACT**

Native Americans used large scales from the gar fish to make arrowheads. Pioneers used gar skins to cover their wooden plowshares (plow blades).

## Lake Nicaragua (canyon)

What was once a saltwater bay of the Pacific Ocean is now the largest lake in Central America.

28. Some of the female cichlid (sick-lid) species provide protection for their eggs and will fan the nest site to prevent debris from covering them while the male guards the perimeter around the nest. How many pair of cichlids do you see protecting a nest or newly hatched fry? \_\_\_\_\_

## Flooded Amazon Rainforest (canyon)

Here in Tennessee, we experience four seasons: spring, summer, fall and winter. Tropical areas near the equator experience only two seasons: rainy and dry. During the rainy season rivers flood out of their banks and into the forests.

29. Fish that feed on the surface of the water have mouths that point up. Find and name a fish that feeds from the surface. \_\_\_\_\_

**FUN FACT**

The arapaima's tongue is extremely hard. Native people of the Amazon used the dried tongues as files or graters.



**Note:** A question may have more than one correct answer. Answers are available on our web site: <http://www.tnaqua.org/KidsTeachers/KidsTeachers.asp>.