

Mezzanine Level

1. Look at the fish in the large tank by the bubble tower. Find the longnose gar. How does the shape of their body help them catch their food?

Before the Basin (top floor)

2. Visit the Champlain Sea Tide Pool. Name two animals that live in the sea tank.

Do these animals live in Lake Champlain today? Why not?

3. Visit the Beluga Whale Dig.  
A skeleton of this animal was found in \_\_\_\_\_, Vermont.  
(town)

What does this tell you about the history of the area in which this skeleton was found?  
Make two educated guesses.

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Lake Champlain Basin Program Resource Room (top floor across from the Sea Tank)

4. Name two animals that live in the Resource Room.

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Name 2 things they have in common:

Name 2 differences:

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

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

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

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

Land of Opportunity (top floor)

5. Visit the American Bullfrog tank. What frog feature helps you to determine if the frog is a male or a female?

6. Is ECHO's Bullfrog a male or a female?

7. Find the area in the exhibit that talks about the Alpine Zone. List two challenges that plants and animals that live in the Alpine Zone face?

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

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

Into the Lake (1<sup>st</sup> floor)

8. The snapping turtle has an aggressive defensive behavior. Name 2 reasons why this turtle behaves this way.

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

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

9. What is one feature of the sturgeon and the catfish that you notice to be different from most other fish? What is the purpose of this feature?

Invasive Species (1<sup>st</sup> floor)

10. What is an aquatic invasive species?

11. Name one invasive species that lives in Lake Champlain. Why is it harmful to Lake Champlain?

12. How do invasive species get into the lake?

- 1 The longnose gar's torpedo shaped body helps it to *move in short speedy sprints*. The gar will hover near the surface, resembling a stick floating, lure small fish into its shadow and then make a quick lunge to capture its unsuspecting prey.
- 2 Possible answers include sea star, brittle star, sea urchin, anemone, hermit crab, periwinkle snail, and horseshoe crab.

No, these animals do not live in Lake Champlain today. They are salt water animals and Lake Champlain is a freshwater lake. They used to live in this region when the water was salty. After the glacier receded, the ocean flowed into the region from the north by way of the St. Lawrence Seaway. They left behind fossilized evidence.

- 3 A skeleton of the beluga whale was found in Charlotte, Vermont.

It tells us a few things about the area. (1) The area was once salt water since beluga whales need a salt water environment to survive. (2) The region called the Champlain Sea must have been much larger than Lake Champlain as the whale skeleton was found inland by several miles from today's shoreline.

- 4 Possible answers include the DeKay's Brown Snake and the American Toad.
- 5 The size of the American Bullfrog's outer eardrum membrane, known as the tympanic membrane, can be used to determine the sex of the animal. If the tympanic membrane is bigger than the frog's eye, it is a male frog. For a female American Bullfrog, the tympanic membrane is the same size or smaller than the eye.
- 6 ECHO's American Bullfrog is a male.
- 7 Possible answers include harsh winters, stiff winds, a short growing season, thin rocky soil, and concentrated air pollution
- 8 The snapping turtle has an aggressive defensive behavior because its shell structure is too small to allow the turtle to pull its head, arms or legs into the shell

for protection. Being a larger species, the snapping turtle is not fast on land and so uses its threatening snapping jaw to ward off predators.

- 9 The sturgeon and the catfish both have whiskers (barbels). Barbels allow the fish to taste things along the bottom of their habitat as they search for possible food.
- 10 Non-native plants and animals that don't belong in the lake and harm lake health.
- 11 Zebra mussels – clog pipes, cut feet and hands, and out compete native mussel species
- 12 By accident: hitchhike on boats  
On purpose: released pets and baitfish

