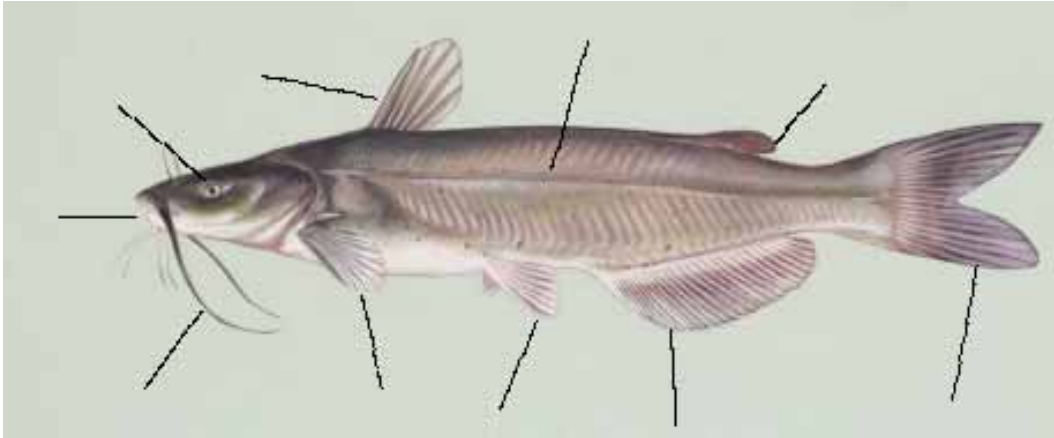


# Fish Composition

1. Label the parts of this Channel Catfish using the words to the right of the picture. You will not use every word:



- pelvic fin
- eye
- lateral line
- adipose fin
- shark fin
- barbel
- stern fin
- dorsal fin
- caudal fin
- anal fin
- forward fin
- pectoral fin
- mouth
- stripe

2. You can often tell if a fish is a strong swimmer and/or in what part of the river (either the channel where there is faster moving water or inlets or bays where there is more stagnant or slower moving water) a fish can be found by looking at its caudal fin. Examine these sample caudal fins below and label them 1-3, 1 being the strongest swimmer of the three, 3 being the weakest. Then explain why and how you chose the order that you did.



Explanation:

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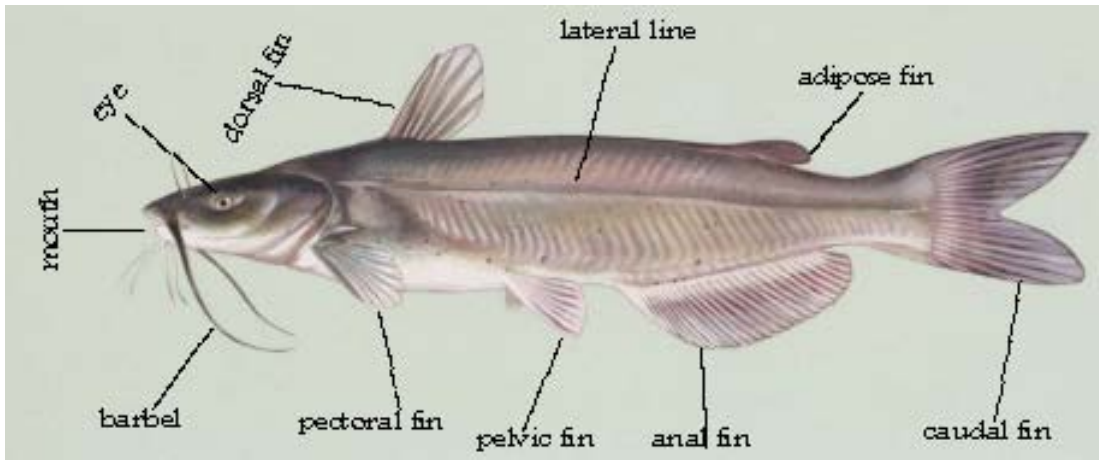
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# Fish Composition Answers: Teacher's Copy

## 1. Label the parts of this Channel Catfish:



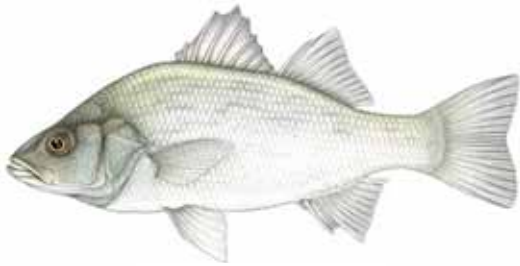
2. You can often tell if a fish is a strong swimmer and/or in what part of the river (either the channel where there is faster moving water or inlets or bays where there is more stagnant or slower moving water) a fish can be found by looking at its caudal fin. Look at these sample caudal fins below and label them 1-3, 1 being the strongest swimmer of the three, 3 being the weakest. Then explain why and how you chose the order that you did.



**Explanation:** The more forked the caudal fin the stronger, more continuous and often faster the swimmer. Number three is square-cut and probably is a bottom dweller living in stagnant to very slow moving water therefore not requiring it to constantly swim against a current. Number two only has a slight fork. Number one has the deepest fork therefore making it a stronger swimmer than the other two. It probably lives in the channel where the water is constantly moving at a higher velocity.

# Surviving the Hudson River

1. Animals must always be on their guard and ready to protect themselves from becoming another animal's next meal or even stand up to bullies that are trying to invade their home. In the Hudson River there are over 200 SPECIES of fish, not to mention the many invertebrates that also call the Hudson their home. You can probably imagine the amount of competition and predation that occurs under those waters! Take a look at these three Hudson River inhabitants and 1. Circle the part(s) of their body that you think they may use to avoid a predator. 2. Explain how they may use these parts to avoid a predator.



A.

White Perch

Explanation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.



B.

Hogchoker

Explanation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.



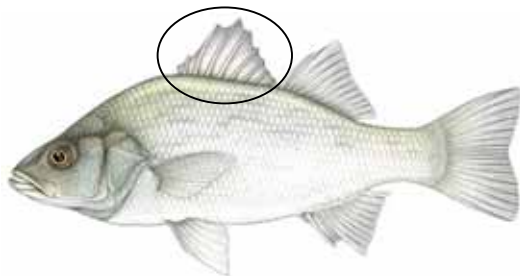
C.

Blue Crab

Explanation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

# Surviving the Hudson River ANSWERS: Teacher's Copy

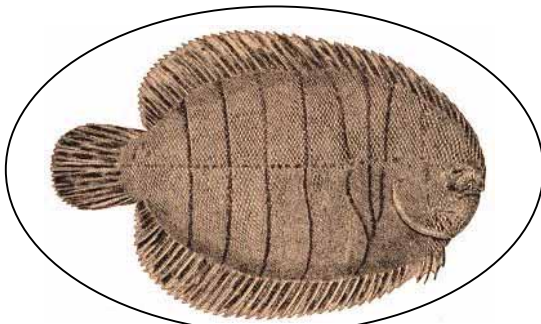
1. Animals must always be on their guard and ready to protect themselves from becoming another animal's next meal or even stand up to bullies that are trying to invade their home. In the Hudson River there are over 200 SPECIES of fish, not to mention the many invertebrates that also call the Hudson their home. You can probably imagine the amount of competition and predation that occurs under those waters! Take a look at these three Hudson River inhabitants and 1. Circle the part(s) of their body that you think they may use to avoid a predator. 2. Explain how they may use these parts to avoid a predator.



A.

White Perch

Explanation: The spiny dorsal fin is just that—it's pretty spiny! The perch will flare its dorsal fin making the spines stick up ready to pierce its predator. Flaring the dorsal fins also make the fish appear larger sometimes tricking the potential predator into thinking the fish is bigger than itself and/or too large to swallow.



B.

Hogchoker

Explanation: The flatness and the coloring (countershading) of the hogchoker allow it to easily blend in with the dirt/sand on the bottom of the river. Its countershading allows it to blend in with the surface of the water/sky hiding it from any predators below it while swimming and blending in with the river bottom hiding it from predators that may be swimming above the little fish.



C.

Blue Crab

Explanation: The cheliped, or claw, is a very powerful tool for the crab and is used for eating and most important fighting and warding off animals that may threaten the crab and its territory. Also the crab's exoskeleton provides an excellent suit of armor protecting its vital organs.

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