

Name _____ Date _____

Fish Characteristics Worksheet

1. Have you ever wondered what it would be like to be a fish? Most likely, you would get bored swimming around in water all the time. But fish have no choice. They have to live in water. Fish are what we call “aquatic” animals. What do you think “aquatic” means?

2. Let’s be ichthyologists—people who study all types of fish! Did you know that fish were here on Earth before the dinosaurs? Wow, that is a very long time ago! There are about 30,000 types of fish in the world. Every year, more new species of fish are discovered. Even though there are many different kinds of fish, they all have similar features. Can you name a few of their common characteristics?

3. Let’s explore some of the characteristics that make fish so unique. First, we need to know that all fish are cold-blooded. What does this mean? It means that all fish, as well as reptiles and amphibians, take on the temperature of their surroundings. Mammals and birds, on the other hand, always have a constant body temperature. Move the animals under the correct heading: either Cold-Blooded Animals or Warm-Blooded Animals. Take a photo of the Cold-Blooded Animals list.

7. The tail of the fish is considered a type of fin. The tail fin can tell you a lot about how the fish moves through the water. If a fish has a forked tail, it moves very quickly. If the tail fin is more rounded, then the fish moves very slowly through the water. Move the fish under the correct heading: either Fast-Swimming Fish or Slow-Swimming Fish. Take a photo of both lists.

8. Even though fish have skin covering their bodies, most fish also have a very special outer covering called scales. These scales are made of bone and help protect the fish from predators. Scales are often coated with slime and grow in an overlapping pattern like the shingles on the roof of a house. Can you think of another purpose for these scales?

9. Now that you know all about shared fish characteristics, let's explore some of the ways that fish are different. There are two major aquatic ecosystems on Earth. Fish can live in either saltwater or freshwater, but very few fish can live in both. Each species of fish has adaptations, or special body structures, that help it survive in a certain ecosystem. Take a closer look at the fish in these saltwater and freshwater ecosystems. Describe some of the ways that these fish differ from each other.

10. Just as people look different from one another, so do fish species. Their body types look different because each species has adapted to where it lives in the water. Fast-moving fish have bodies like submarines so they can swim through the top and middle of the water. Fish that live at the bottom of their ecosystems have very long, flat bodies. Move the fish models into the freshwater ecosystem where you think these fish would live based on their body types. Take a photo.

11. Fish have three main types of mouths, suited to where they live and what they eat. Most fish have a straight-forward mouth but fish can also have a down-turned or upturned mouth. Read the labels describing the three major types of mouths and their functions. Look closely at the mouth of the catfish. Based on the shape and location of its mouth, where do you think this fish finds its food?

12. Not all fish have teeth, but the ones that do are predators like the shark. This means that they use their teeth not only to catch their prey but also to chew it. Some fish even use their strong teeth to eat animals with hard shells, such as a lobster, crab, or shrimp. Examine these fish and see if they have teeth. Move the fish without teeth into the trash. Choose one fish and take a close-up photo of its teeth.

13. One of the greatest adaptations that fish use for survival in their particular ecosystem is camouflage. Fish use many different colors and patterns to blend into their environment and avoid predators. This can make fish look very different. Here are some of the fish that live in the Great Barrier Reef waters. Why are the fish in this particular ecosystem so colorful?

14. Wow! That was an exciting journey through the world of fish! The next time you go fishing, whether on a lake or in the ocean, you can share your knowledge about these interesting aquatic creatures. Here are some of the fish that we explored today. Take a photo of your favorite fish. Describe its special characteristics, both internal and external, that help it survive in its freshwater or saltwater ecosystem.