Fishing Fun: Note: Use this information sheet to assist you in answering questions that may come up during children's exploration of the fish used for gyotaku. This sheet is not intended for student use.

Fish Information Sheet

Fish vary greatly in size and color. There are tiny fish, giant fish, flat fish, skinny fish, flying fish, electric fish and fish that live in schools. Fish represent more than half of all vertebrate animals. All fish are adapted to live in water. Fish can be found in most bodies of water—both salty, like oceans and bays, and fresh, like lakes, streams and rivers.

Eyes

Dorsal Fin

Fish have eyes that they can move independently, enabling them to see in multiple directions at the same time. Eyelids and tear glands are not needed. Water keeps the eyes wet and clean.

Nostrils

A fish uses its nostrils for smelling, but not for breathing. A sense of smell is used to find food. Some fish (like salmon) use smell for finding their way back to their home stream.

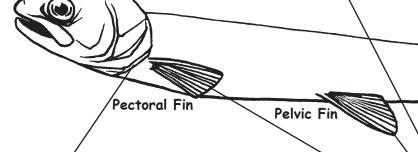
Lateral Line

Most fish have a line running along each side of their body. The little pores (small holes) in the line help the fish sense movements of others animals and objects in the water.

Adipose Fin

Anal Fin

Caudal Fin



Just like people, fish must breathe oxygen in order to live. While we get oxygen from breathing the air around us, fish get oxygen from the water which flows through their mouths and over their gills.

Gills are found under a flap (operculum) just behind the head. They have many folds of skin and special tissue which absorb oxygen from the water.

Scales

Gills

The bodies of most fish are covered with thin overlapping scales.

Fins

Fins help a fish swim. The dorsal and anal fins help keep the fish balanced so its body won't tip from side to side. Pectoral and pelvic fins are found on each side of the body, similar to the arms and legs in other animals. These fins are used for turning, backing up and stopping, as well as for balancing. The caudal or tail fin sweeps from side to side and pushes the fish forward. The adipose fin, if present, is small and fleshy and has no special use.

Shape

A streamlined body helps a fish move through water more easily.

Fishing FunNote: Show children how to "bait hooks." Place the paper clip on the hook end of a bait figure onto the paper clip "hook" at the end of a string. When the paper clip on the bait touches the magnet on a fish's mouth, the fish will get caught.

Directions: Copy the figures below onto card stock and cut out. Consider reducing and enlarging some copies to create fish of different sizes for Mighty Math. Color the figures (if desired) and laminate. Attach strong magnets to the mouth of each fish figure. Packing tape works well. Attach two paper clips to each bait figure, one on the hook side and one on the side opposite. Make fishing rods by tying strings to sticks and paper clip "hooks" to the end of the strings.



Goin' on a Fishin' Trip

(to the tune of "Goin' on a Bear Hunt")

One person leads, the rest of the group repeats each line after

Goin' on a fishing trip (slap hands on thighs like walking) Gonna catch a big one I'm so excited (jump up and down) What's that? We'll need some worms? (shrug shoulders) What's that? How do you fish? (shrug shoulders) Let's dia...

Diggin' to the left, (digging motions) Diggin' to the right, Diggin' right in front. Put the worms in the pail. Let's go!

Goin' on a fishing trip (slap hands on thighs like walking) Gonna catch a big one I'm so excited (jump up and down) What's that? We'll need a pole? (shrua shoulders) Let's find a branch on that tree...

> Climb up to the left, (climbing motions) Climb up to the right, Climb up right in front. Got it and tied a string and a hook.

Goin' on a fishing trip (slap hands on thighs like walking) Gonna catch a big one I'm so excited (jump up and down) What's that? We need a lake? (shrua shoulders) Let's drive.

Drivin' to the left, (steering wheel motion)

Goin' on a fishing trip (slap hands on thighs like walking) Gonna catch a big one I'm so excited (jump up and down) Let's cast...

> Cast it to the left, (casting motion) Cast it to the right, Cast it straight ahead. And wait... and wait... and wait...

Goin' on a fishing trip (slap hands on thighs like walking) Gonna catch a big one I'm so excited (jump up and down) What's that? I got a bite! (shrua shoulders)

> Reel it in to the left, Reel it in to the right, Reel it straight in... Whoa! It's HUGE!

Goin' on a fishing trip (slap hands on thighs like walking) Gonna catch a big one I'm so excited (jump up and down) I caught a BIG one, (make big measure with hands) And then I let it go!

Drivin' to the right, Drivin' straight ahead. We're there! Let's go! Fish Puzzle

Directions: Make a copy of the puzzle above for each child. Make it a "puzzle" by cutting the pieces out for them. Let children "fish" for the pieces to complete their puzzles. Allow children to glue their puzzles to construction paper if they wish. Encourage them to add habitat components (food and shelter) for their fish.