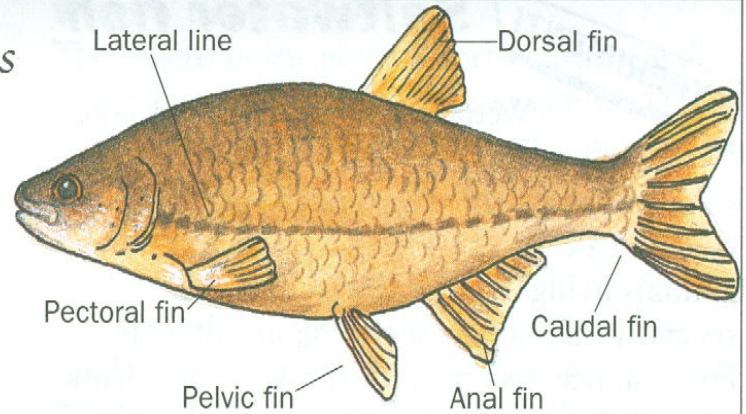


How a Fish Works

Fancy fins and sensitive scales

If you look underneath a sailboat, you'll see a triangular shape called a keel sticking down into the water. The keel helps keep the boat from rolling over in the water. The pelvic fin, on the underside of a fish, works like a keel. The dorsal fins, which stick up from a fish's back, also help keep it upright in water. Watch your fish as they swim in the aquarium. Can you figure out what the side fins (pectorals) and the tail (caudal fin) are used for? Pectorals help a fish balance and turn, while the caudal fin is important for steering and propelling fast fish through the water.

Put a pencil into the water in front of a fish and watch what happens. The fish will swim away to avoid the obstacle, even if it doesn't see it. That's because fish can detect



movements and changing currents in the water. On the sides of a fish's body, you can see a special line made up of scales that are a different shape from all of the other body scales. This is the lateral line. Beneath the lateral line is a very sensitive system of nerves that enable the fish to sense movement in the water.

Moving mouths

Have you ever wondered why fish always look like they are talking underwater? Fish open and close their mouths while they swim, in order to breathe. To get oxygen, a fish gulps water into its mouth and then pumps it out through slits at the sides of its head, called opercula, or gill covers. Look for the flapping

gill covers on your fish. Beneath the gill covers are a fish's feathery gills. These act like lungs, taking oxygen from the water and releasing carbon dioxide. To stay alive, fish must keep fresh water constantly flowing over their gills, even while they're asleep!

