

ACTIVITY How Do Fish Breathe?

You already probably know that when you breathe you inhale air (with oxygen in it) through either your mouth or nose, and you then exhale air back through your mouth or nose. When the air enters your body it travels to your lungs where the oxygen is then taken out of the air and sent to all the cells in your body. All animals need oxygen to survive. But fish live in the water, so how do they breathe? In this activity, you'll be creating a fish to demonstrate how they breathe..

SUPPLY LIST

- Envelope
- Scissors
- Tape or glue
- Construction paper
- Crayons, markers, or colored pencils

INSTRUCTIONS

1. Begin by sealing your envelope. Then, cut a triangle on one of the short sides of the envelope; this is your fish's mouth.
2. Tape or glue the triangle on the other short side of the envelope to create a tail fin.
3. Draw eyes on your fish and gill slits behind the eyes.
4. Use scissors and cut the gill slits open.
5. Cut out two side fins, also known as pectoral fins, and tape or glue them to the bottom side of your fish below the gill slits.
6. Cut out a top fin, also known as a dorsal fin, and tape or glue it to the top of your fish.
7. Spend some time decorating your fish with beautifully colored scales using crayons, markers, or colored pencils.
8. Cut several thin strips of yellow, white, and blue paper. The blue represents the water, the white represents oxygen which is what fish must have to breathe, and the yellow represents carbon dioxide which is the waste product the fish must get rid of.
9. Insert blue and white strips into the mouth. This represents the water and oxygen the fish gulps through its mouth which it then pumps out of its gills. In a real fish, as the water flows across the gills, the gills trap the oxygen so it can be delivered all over the fish's body. Pull the blue strip through the gill slits.
10. Insert a yellow strip through the gill slits. This shows that as the water flows through the gills, carbon dioxide is released and leaves the fish along with the water.

NOTE: While it's difficult to show a true representation of this on a paper model, it's important to understand that fish have many, many gills which act like filters behind their gill slits, allowing them to trap a lot of oxygen to be delivered to their bodies while at the same time allowing the water to escape.

