**How Do Fish Breathe?**

All animals breathe just like humans. How they breathe, however, varies. Breathe by inhaling oxygen and exhaling carbon dioxide as waste. Air flows in through the human’s nose or mouth into the lungs where oxygen is transported through the blood to the rest of the human body. Humans need air to breathe. So, what does that mean for animals that live in the water?

Like humans, fish also need oxygen and emit carbon dioxide to survive. But using the lungs, these creatures that live in water use organs called gills. The gills are organs located on the sides of the fish’s head. These gills have many small blood vessels called capillaries.

When the fish opens, the water will flow over the gills. After that, the blood in the capillaries will pick up oxygen that is soluble in water. The blood then moves through the fish’s body to provide oxygen throughout the body, just like in humans.

All bony fish also have a bony plate called an operculum. This operculum is useful for opening and closing to protect the gills. Breathing underwater is difficult. The air we breathe has an oxygen concentration of 200,000 parts per million.

Whereas water only has a concentration of 4 to 8 parts per million. This means fish need to flow a lot of water over their gills to get the amount of oxygen to survive. In addition, the gills are very useful for extracting the oxygen needed by fish.

Breathing becomes more difficult as the oxygen concentration decreases. Low levels of oxygen concentration make it impossible for animals to survive. Although it can occur naturally, it can also be created by human activity.

When pollution is high, such as waste dumped into the sea, this will cause algae blooms which then die and decompose. Furthermore, it will cause the zone to have a low oxygen concentration level of oxygen.

Fish need clean water to breathe. Similarly, humans need clean air to breathe. Humans can help these gilled creatures to thrive by keeping their habitat free of pollutants.

**How Does Covid-19 Spread?**

People in the world are shocked with the emergence of covid-19. This virus becomes a pandemic which has contaminated people all around the world. What is Covid-19? Covid-19 is a very infectious disease caused by a new kind of coronavirus. Is it dangerous? How can it spread to humans?

Firstly, the virus is supposed to spread primarily from person-to-person. These viruses can spread between persons who are in contact approximately in about 6 feets.

Secondly, covid-19 can also range via respiratory dewdrops produced while an infected person coughs or sneezes. These drops can land in the noses or mouths of persons who are nearby. Or they can feasibly be inhaled to the lungs.

Thirdly, it is spread by any human interaction with infected objects or surfaces. It may be likely that a person can catch up COVID-19 by touching objects devouring the virus. Then they drop the virus to their own nose, mouth, or eyes.

How easily a virus blowout from person-to-person can vary. These viruses are highly spreadable. Therefore, we have to be alert and keep following health protocol.