



NEMO

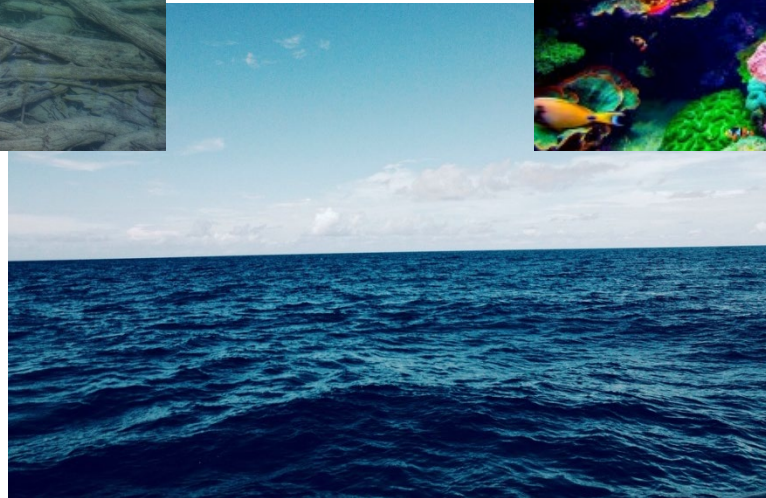
**Pre-visit Lessons
2020-2021**

AQUATIC HABITATS

Rivers & Lakes



Coral Reefs



Open Ocean

FRESHWATER HABITATS



Lakes & Rivers

Freshwater Lakes & Rivers



We have these habitats here in Cleveland!

Freshwater Lakes & Rivers



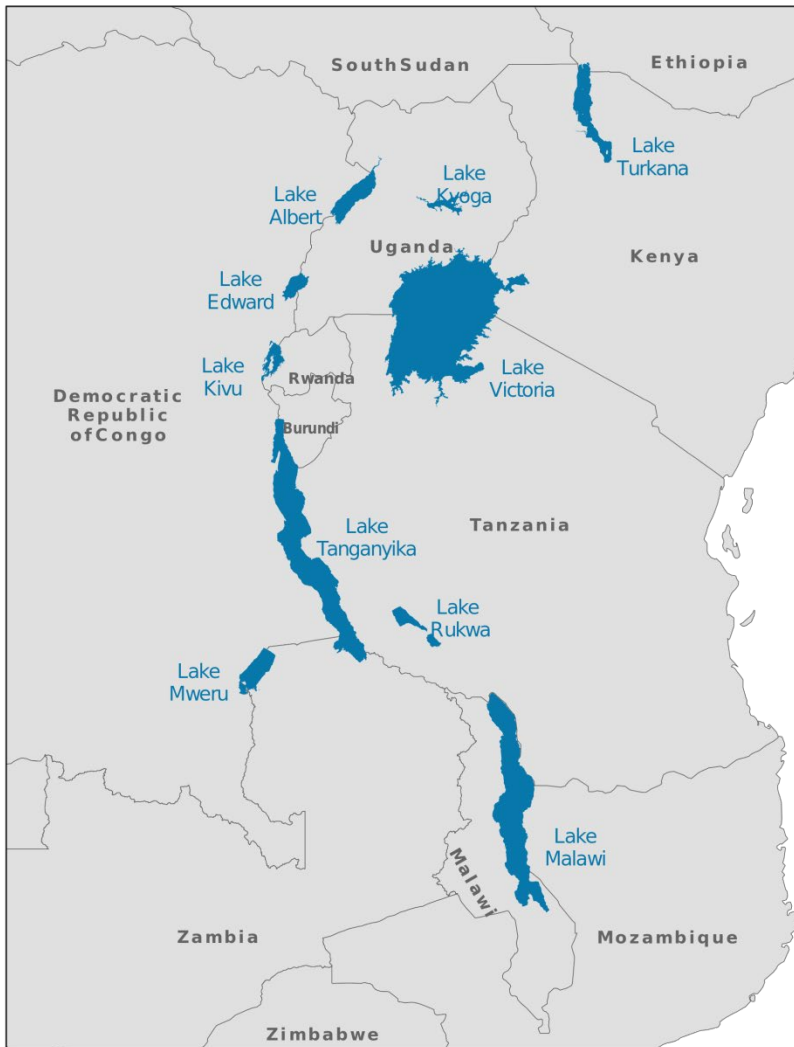
There are river habitats in every state!

Freshwater Rivers & Lakes



The Great Lakes are the largest concentration of freshwater in the world!

Freshwater Lakes & Rivers



The Great Lakes of Africa
have the second largest
concentration of freshwater

Freshwater Rivers & Lakes



The Nile is the longest river in the world at 4,258 miles

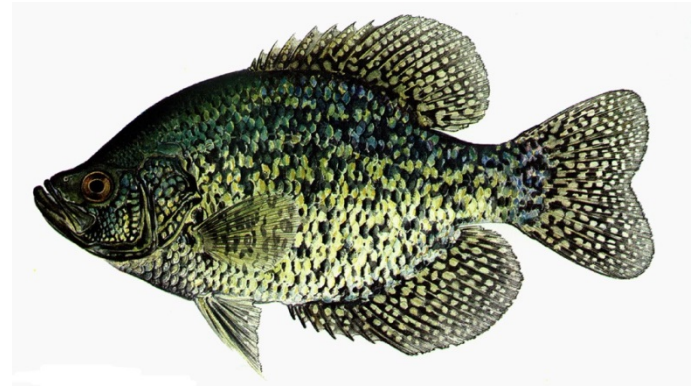
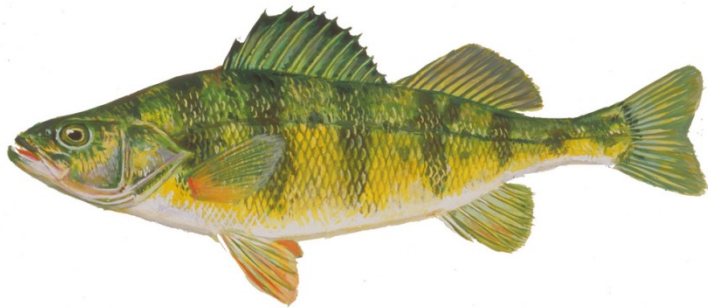


The Amazon is the second longest river in the world at 3,977 miles

The Amazon has the largest watershed of any river

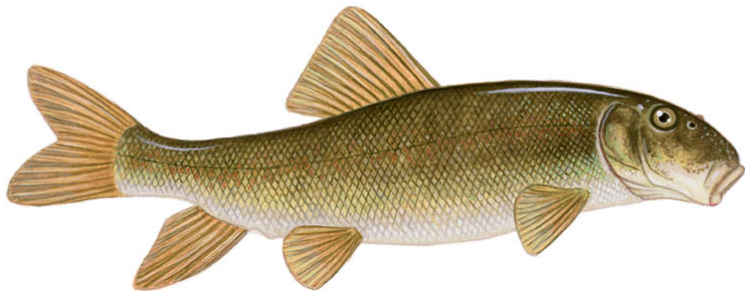


Freshwater Lakes & Rivers



Fish in Ohio's Lakes & Rivers
tend to be dull, dark colors
to camouflage with plants
and rocks

Freshwater Lakes & Rivers



Fish in flowing rivers typically have streamlined bodies and wedge tails to swim in the current

Freshwater Lakes & Rivers



Some fish are territorial and have bright color patterns as a warning sign.



Freshwater Lakes & Rivers



Lakes & Rivers often have plants, rocks, and logs

Freshwater Lakes & Rivers

During your NEMO program, we'll explore fish in Ohio Lakes & Rivers, Asia & Indonesia, and Tropical Forest



Ohio Lakes & Rivers Gallery



Asia & Indonesia
Gallery

Freshwater Lakes & Rivers

During your NEMO program, we'll explore fish in Ohio Lakes & Rivers, Asia & Indonesia, and Tropical Forest



Tropical Forest Gallery

We will also explore our saltwater exhibits at the Aquarium. What saltwater habitats might we have?

SALTWATER HABITATS



Coral Reefs



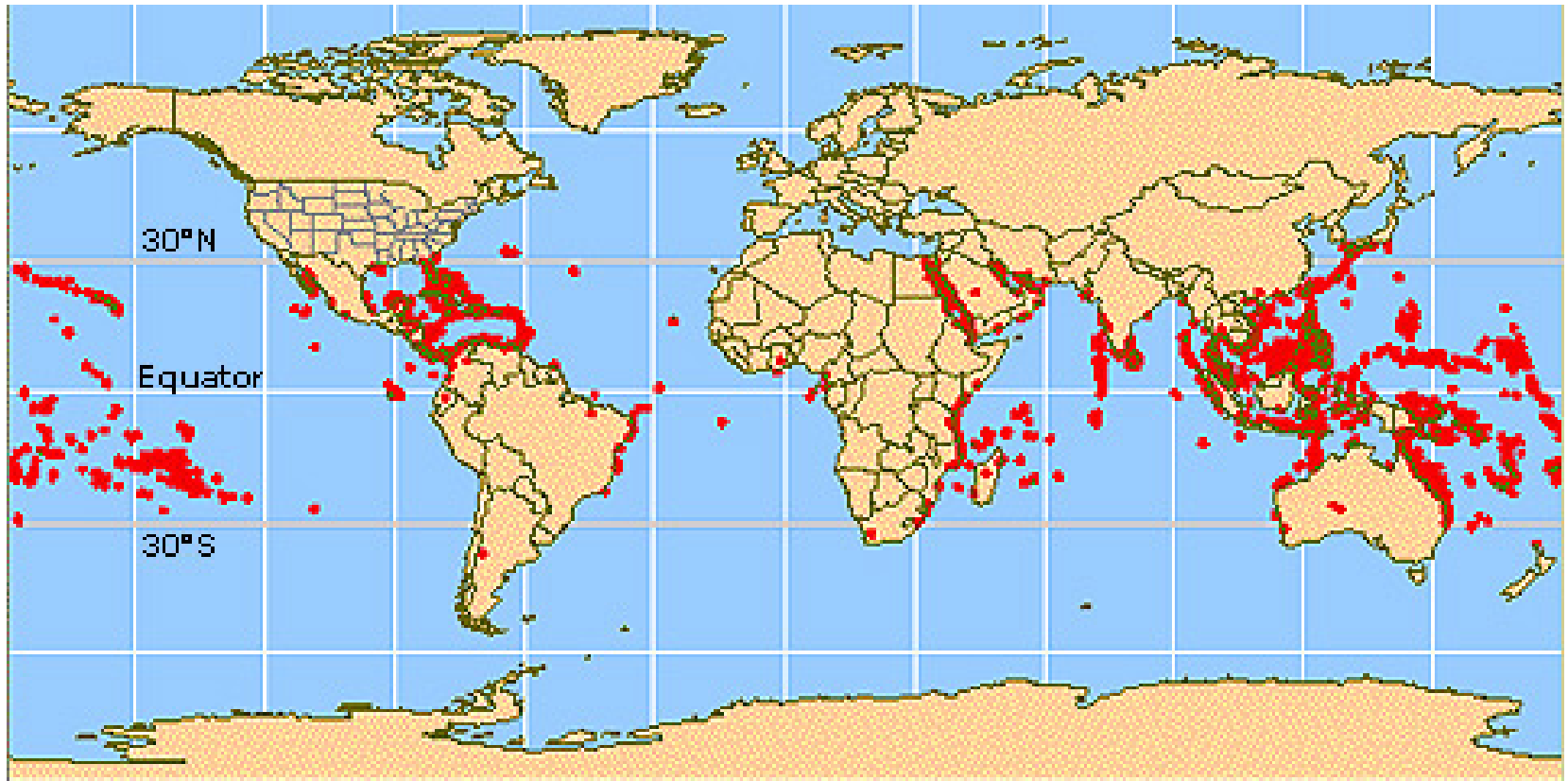
Open Ocean

Coral Reefs



Coral Reefs are saltwater habitats found in the ocean

Coral Reefs



Most coral reefs are found in warm water along the equator

Coral Reefs

Coral reefs contain 25% of all marine life
Yet take up less than 1% of the ocean floor



They are the 2nd most biodiverse habitat after the rainforest

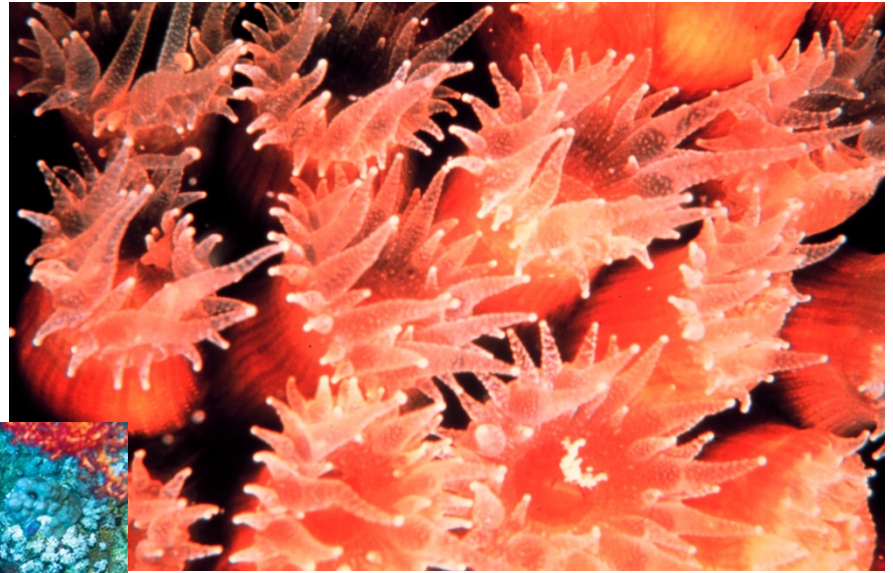
Coral Reefs



Coral may look like plants, but are actually animals!

Coral Reefs

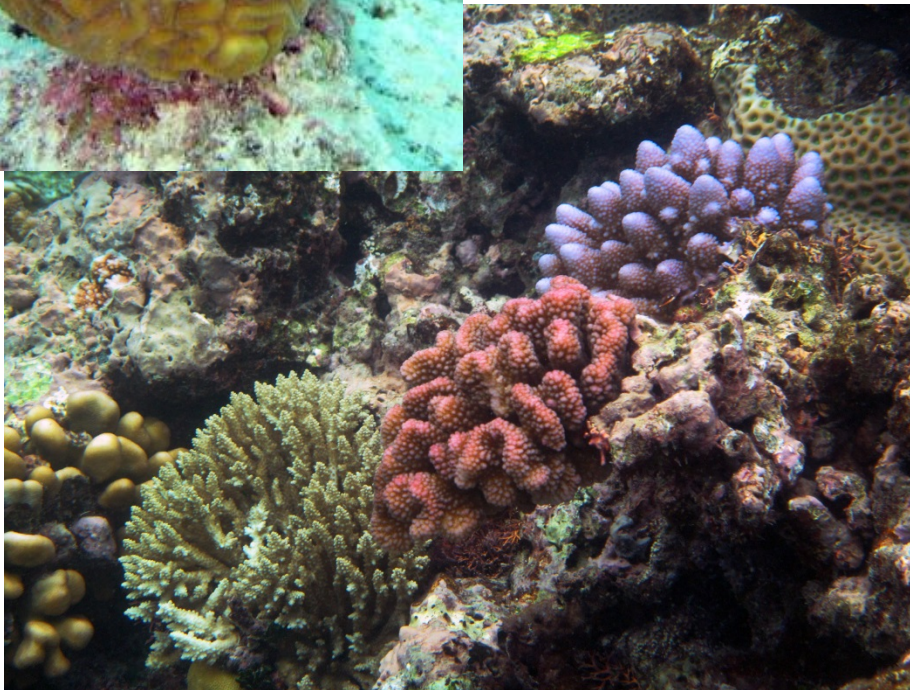
Coral feed with tentacles



And from algae that do
photosynthesis in their cells

The color of coral comes
from the algae

Coral Reefs



There are many
shapes, sizes,
and colors of
coral.

Coral Reefs



Coral reefs
provide shelter
for fish and
other animals.

Coral Reefs



There are many places to hide and camouflage on a reef

Coral Reefs



Reef fish are often colorful to blend in with bright coral



Coral Reefs

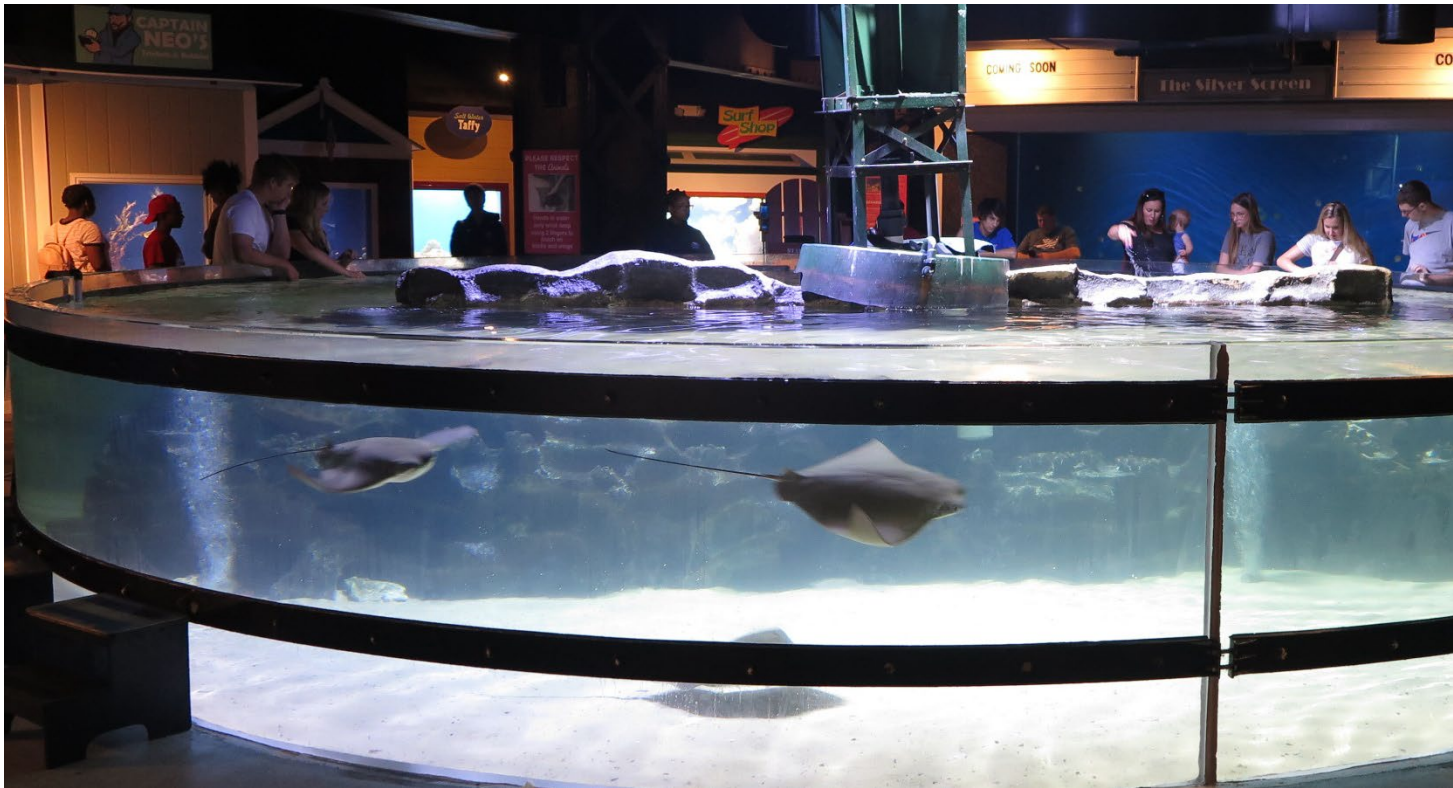


These fish have skinny body shapes and slow swimming tails to navigate through the reefs



Coral Reefs

During your NEMO program, we'll explore fish in our Coastal Boardwalk Gallery



We will see many coral reef animals here, before arriving at another saltwater gallery

Open Ocean



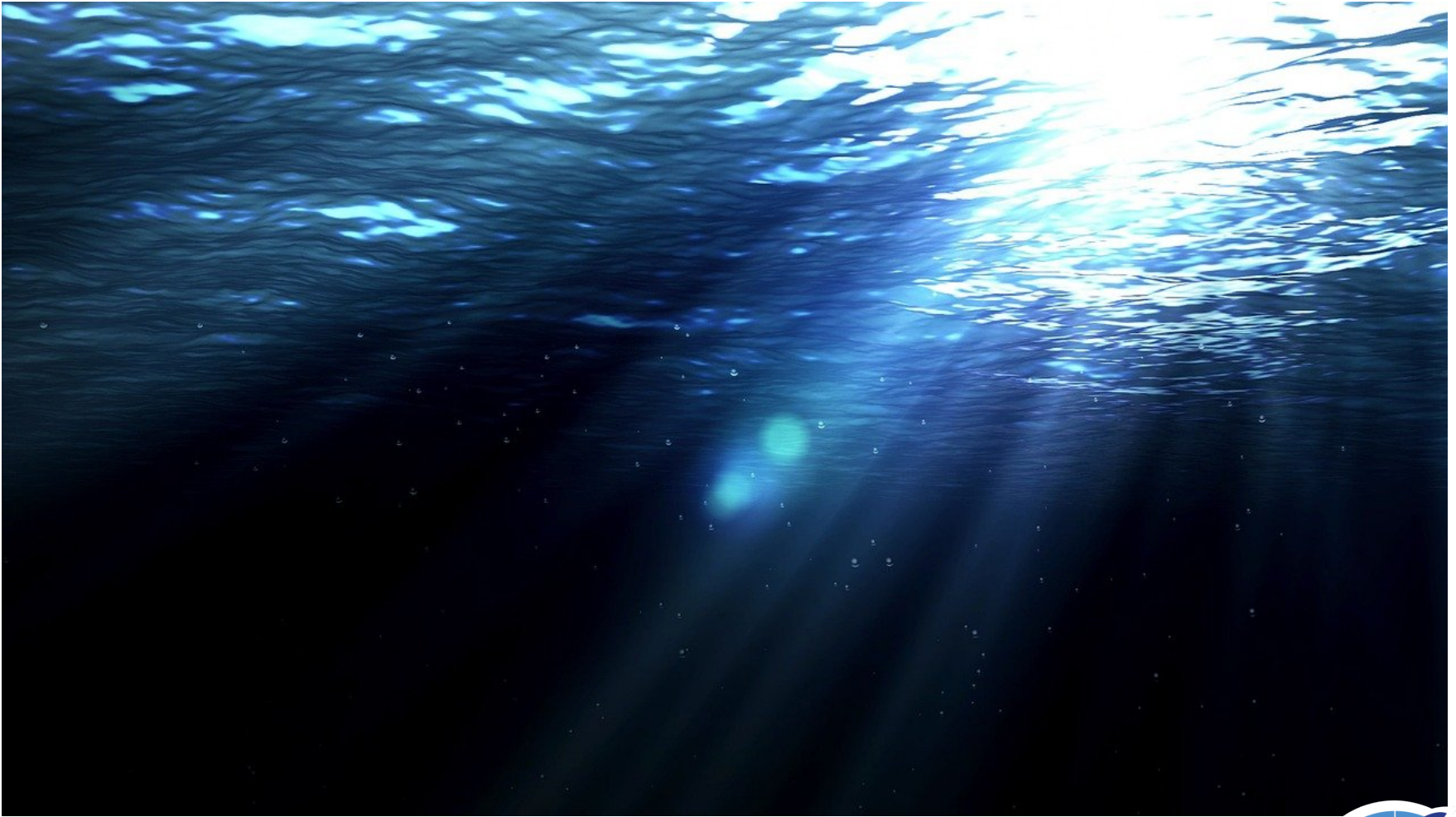
The Open Ocean is another saltwater habitat

Open Ocean



The open ocean is HUGE and much is still unexplored

Open Ocean



There is no place for fish to hide in the open ocean
(no rocks, corals, or plants)

Open Ocean



Open ocean fish
camouflage using
countershading

Or by blending in
with their friends

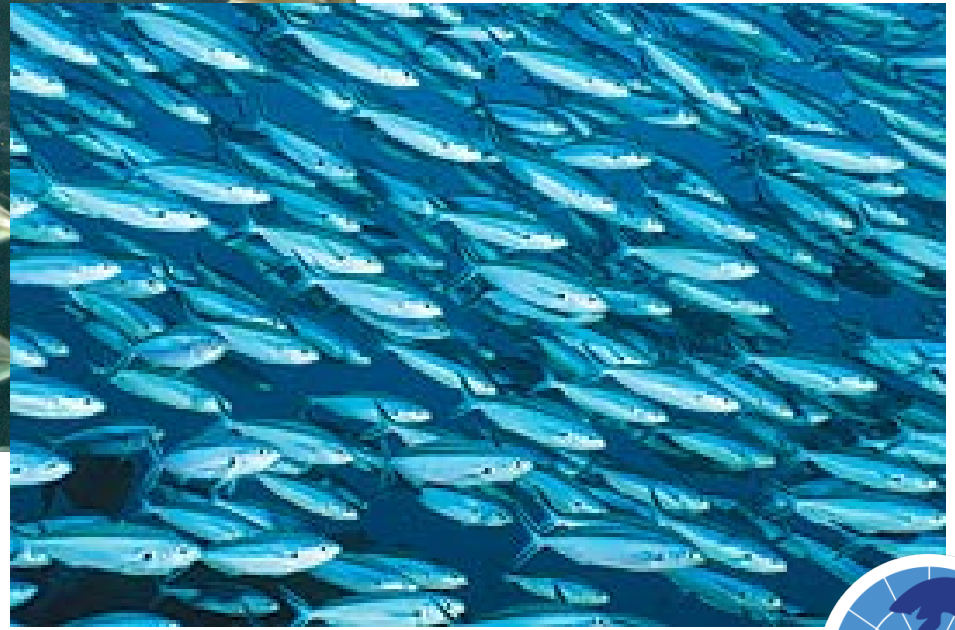


Open Ocean

Many small fish
school together for
protection



Fish in the open ocean
are good at swimming
constantly



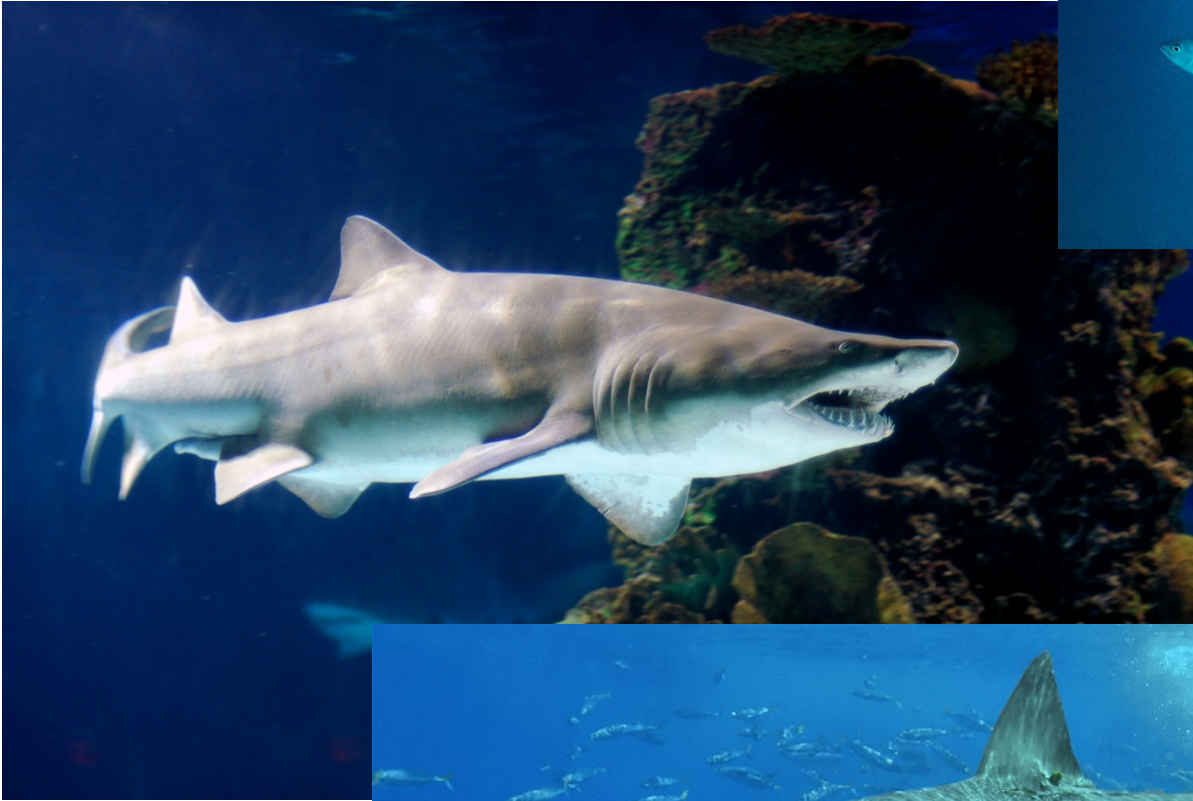
Open Ocean

Forked tails, for fast swimming, are common in the open ocean



Uneven shaped tails are good for constant swimming

Open Ocean

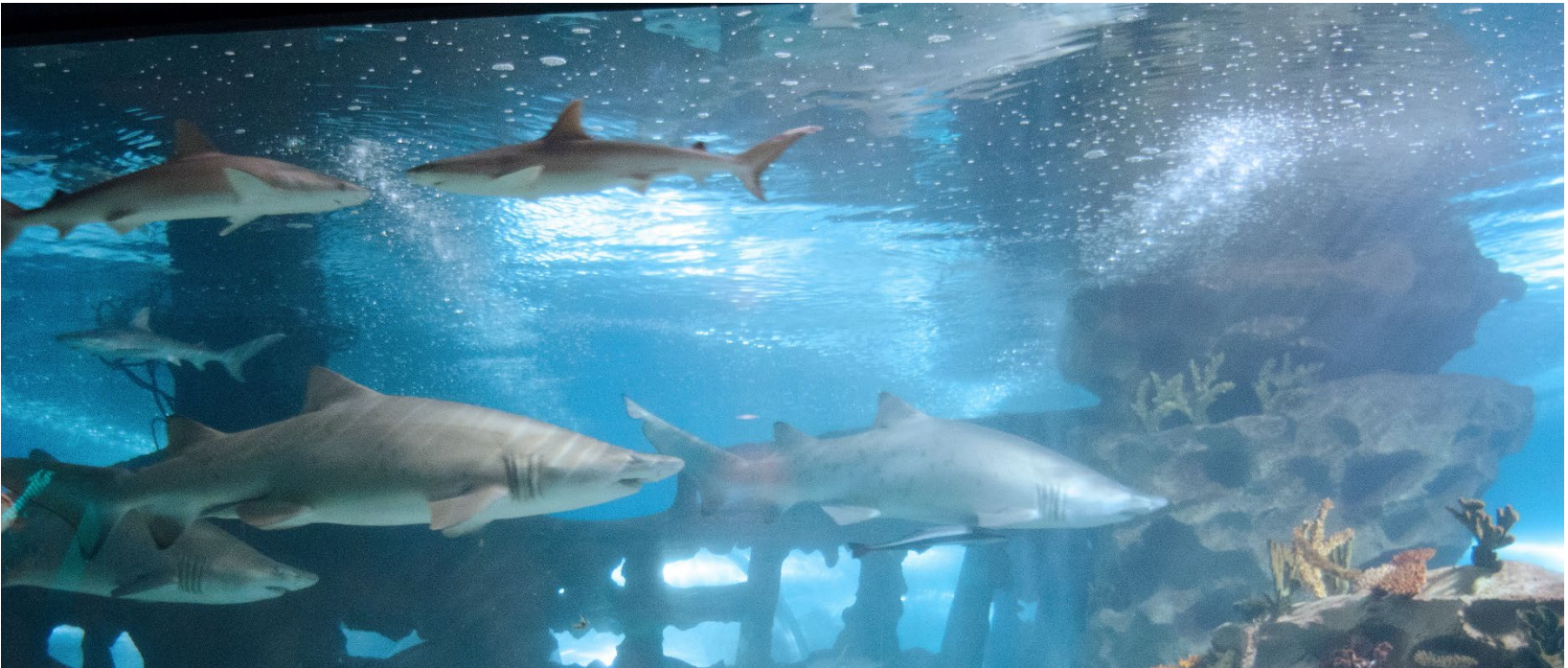


Many open ocean fish have rocket shaped bodies



Open Ocean

During your NEMO program, we'll explore fish in our shark exhibit



Before we see all of these animals at the Aquarium, we should be adaptations experts. So let's continue practicing!

WHAT ADAPTATIONS DO YOU SEE?



ADAPTATION

A trait or characteristic that helps an organism survive.

Adaptations can be **physical** or **behavioral**



What adaptations
do you see on the
green moray eel?

HOW ARE ANIMALS ADAPTED TO THEIR HABITAT



Physical Adaptations:

- Body shape
- Tail shape
- Mouth shape
- Color pattern

ADAPTATION ID

Channel Catfish – Mouth Shape



**Mouth
Shape**



Terminal



Downturned



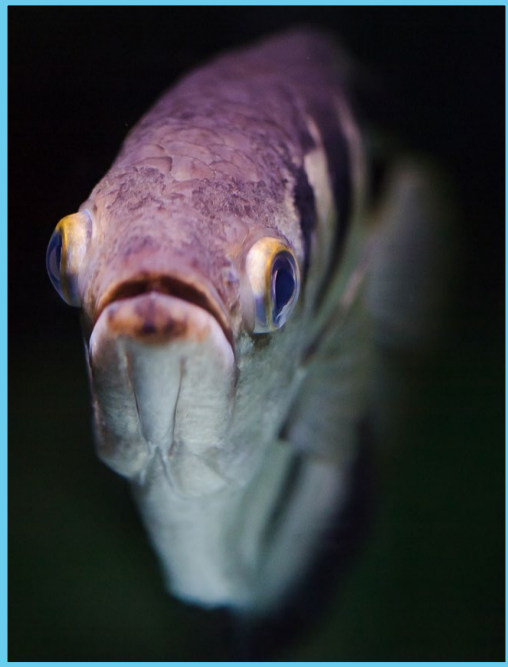
Upturned



Gulping

ADAPTATION ID

Archer Fish – Body Shape



Body
Shape



Rocket



Tall Pancake



Flat-bellied



Noodle

ADAPTATION ID

Snowflake Eel – Tail Shape



**Tail
Shape**



Wedge



Forked



Rounded



Uneven

ADAPTATION ID

Sand Tiger Shark – Color Pattern



Color
Pattern



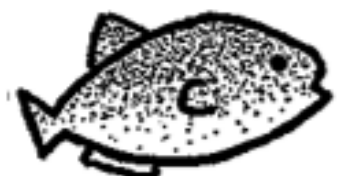
Countershading



Stripes



Spots



Mottled



**West Bank of the Flats | 2000 Sycamore Street | Cleveland, OH
216.862.8803 | greaterclevelandaquarium.com**

    **#cleaquarium**