

Inventive Ichthyologists

The year is 2025. Since the turn of the century, pollution, over fishing and global warming has dramatically altered characteristics of the oceans. Come up with a composite of 10 characteristics that would describe the Atlantic Ocean in 2025. Given the hypothetically evolved condition of the ocean, create a fish of the future, listing many different and unusual ways that their fish will adapt to survive.

First ask yourself some environment questions:

- How has the environment changed?
- Has the salinity increased or decreased?
- Has the temperature changed?
- Have other abiotic factors changed (currents, topography, wave pattern, succession)?
- How have the organisms of the environment changed (migration, extinction, adaptation)?

Now think about the fish you will create and ask some fish questions:

Does this fish swim in a school?

Does it live on the bottom?

Does it have to travel far?

Does it need to blend in with the environment?

Does it have warning colors to let other fish know it is dangerous or territorial?

Would it mimic another kind of fish or other object (such as, sea grass, coral, rock, etc.)?

Does its body need to be able to squeeze into crevices or tunnels?

What are its predators, what is its prey?

1. Create your list of 10 characteristics of the Atlantic Ocean.
2. Brainstorm different and unusual adaptations and behaviors that will impact characteristics of your fish and ensure its survival.
3. Categorize your ideas and narrow the specific characteristics of your fish's environment.
4. Use the drawing toolbar or a paint application to design and draw your fish.
5. Give it a scientific name and a common name that are descriptive of your animal.

Scientific Name Review

Each organism is assigned a Genus name (capitalized) and a species name (lower case). Both names are usually italicized. Organisms with the same genus names are closely related (such as *Canis* for all dogs), while those with similar species names may share some common features, such as color or shape (as in *rubrum* for red).

By looking for the root meaning of the Latin names, you may deduce the characteristics of an organism. So by using Latin words describing the characteristics of an "invented" animal, you can name the new species you create.

Write a paragraph describing conditions and how your fish survives its environment. Or, you could make a picture and diagram to show it.

Bonus:

Define "Ichthyologist" and describe what a student such as yourself would have to do to gain that title. Are Ichthyologists typically Icky or Inventive? Explain.