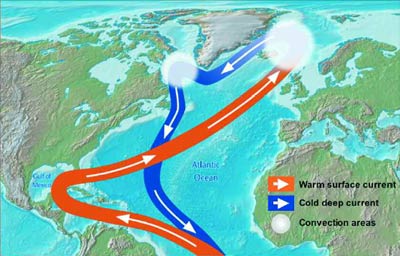
The North Atlantic Current Investigation Activity Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You have just discovered the mechanism that drives the **North Atlantic Current!**

The North Atlantic Current is a phenomenon known as *thermohaline circulation* or the “great conveyor belt.” In the North Atlantic, surface water surface water moving north from lower latitudes (near equator) becomes saltier (due to evaporation) and colder as it moves northward. This causes the density of the water to increase, and the water eventually sinks as it enters the North Atlantic. **When the water sinks, it drives a current that plays a significant role in global ocean circulation.** The sunken water (it’s colder and more dense) slowly flows along the bottom of the ocean back toward the lower latitudes (near equator) where it eventually rises, like a conveyor belt, to the surface and starts the journey north again.



1. What would disrupt this circulation? In other words, what might cause the water NOT to sink in the North Atlantic? (assuming that the temperature in the North Atlantic is constant)
2. Where would this source come from on Earth?
3. What may have caused this source?

LETS PUT IT ALL TOGETHER! Remember the terms described in the clip from *The Day After Tomorrow*? Based you’re your newly discovered knowledge, number the following terms in a logical, cause and effect order: (Hint: 1 is pollution of fossil fuel)

* Melting glaciers
* Release of green house gases
* Shutting down the North Atlantic current
* Climate change crisis
* Global warming
* Addition of freshwater
* Pollution of fossil fuels