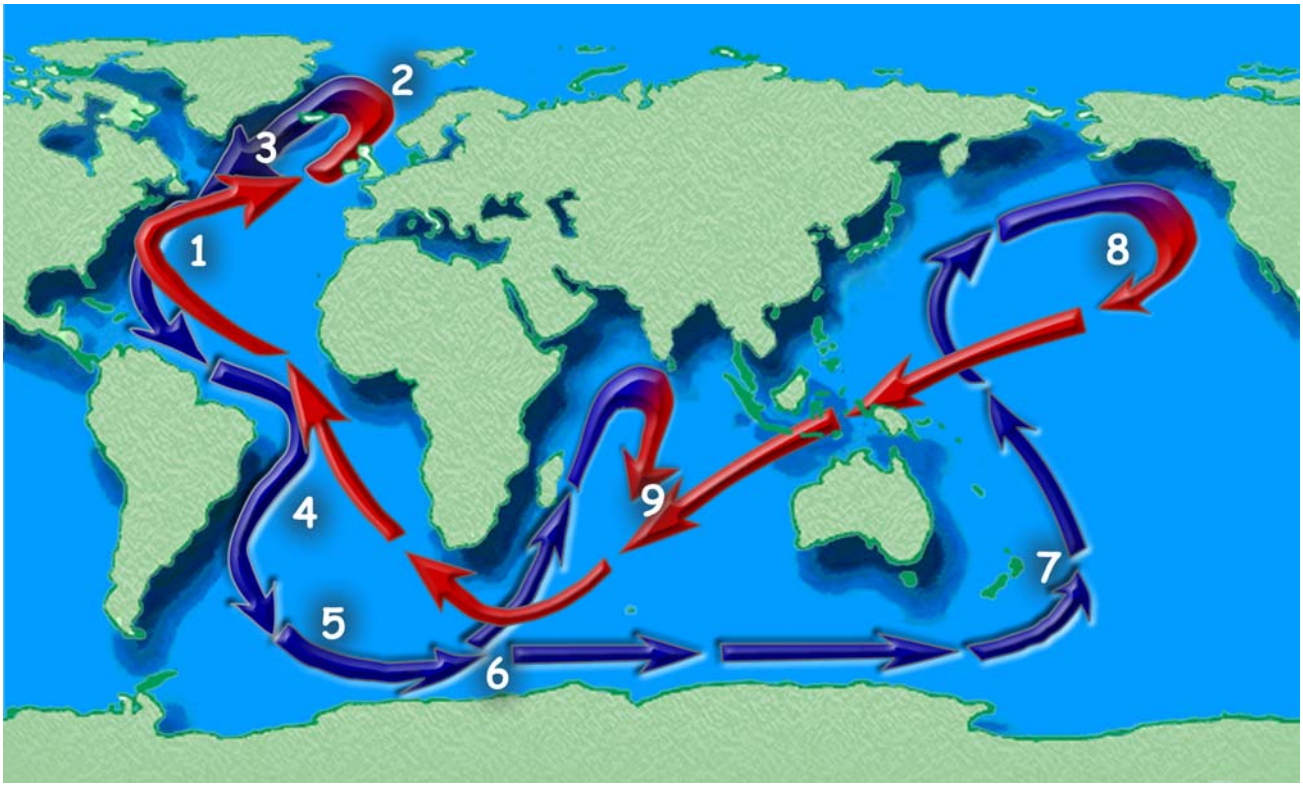
Ocean Conveyor Belt

Below is an image of the ocean conveyor belt describing how it works its way through the world's oceans. The numbers convey information for points along its path.



1. The Gulf Stream brings warm, salty water to the Northeast Atlantic.
2. The water cools as it mixes with cold water from the Arctic. As it becomes more dense, the water sinks in the Norwegian-Greenland Sea. This sinking water is called the North Atlantic Deep Water (NADW).
3. As the warm water takes the place of the cold water, the NADW flows to the south.
4. The cold water of the NADW continues south into the South Atlantic, where it mixes with cold water from the Southern Ocean near Antarctica. As the waters move from the North Atlantic to the South Atlantic, they stay on the western side of the basins because the Earth's rotation also affects the path of these deep waters. This water, which has also sunk because of its density, is called the Antarctic Bottom Water (AABW).
5. The mixed water from NADW and AABW moves along the ocean bottom north of Antarctica.
6. Two branches of deep water form. One branch goes to the east coast of Africa, where it warms and rises, amd more cold water takes its place.
7. The second branch moves around the east coast of Australia in the South Pacific and then moves north. During this journey, it warms and rises and more cold water takes its place on the ocean floor.
8. The now warmed water turns south and west flowing past Indonesia, Singapore, and the Phillipines.
9. The two formerly cold branches meet up again southwest of Indonesia. They then move south around the coast of Africa and north into the Atlantic Ocean. Once back in the Atlantic, the water begins its journey again. An entire roundtrip journey takes 1,000-1,500 years.