Currents put the motion in the ocean!

Seas and oceans have a huge effect on our weather. Warm-water currents carry the Sun's heat to cold places. Cold-water currents carry cool temperatures to hot places. This stops temperatures on Earth from becoming too extreme—and makes our planet a much friendlier home for humans, plants, and animals!

NORTH AMERICA

... the Gulf Stream flows past Florida ...

... up the east coast of the United States and Canada ...

... and across to northeast Europe ...

... then it becomes the Canary Current ...

EUROPE

Without the Gulf Stream, many places in Europe would be a whole lot colder than they are now.

... which becomes the North Equatorial Current ...

SOUTH AMERICA

Sharks and other marine life often follow currents.

Currents help ocean creatures to swim faster and find food.

AFRICA

Currents are patterns of moving water. They are driven by the wind, the rotation of the Earth, and the temperature and saltiness of the water. Here you can see the Gulf Stream, a current that starts in the Gulf of Mexico. It carries warm water from the Americas across the Atlantic Ocean to Europe and North Africa.

Currents like the Gulf Stream are part of gigantic, swirling, ocean-sized circles called gyres. You can see the North Atlantic Gyre on this page. Gyres in the northern hemisphere rotate clockwise, and gyres in the southern hemisphere rotate anticlockwise!