

A sunset over the ocean with a play button icon. The sun is low on the horizon, casting a golden glow across the sky and reflecting on the water. The water is a deep blue with white-capped waves. In the distance, a dark silhouette of a mountain range is visible against the horizon. The foreground shows the dark silhouette of a rocky coastline. A pink circular play button icon is centered in the lower half of the image.

# Galapagos: A **Special** Archipelago

# A Special Archipelago

The Galapagos Islands are located in the Pacific Ocean on the Nazca Plate. They are moving southeastwards at a rate of 5cm a year.

The cold water Humboldt Current flows north from Antarctica along the west coast of South America.

The Islands are located 1000km from the west coast of Ecuador.

This makes plumes of superhot magma rise to the surface, creating volcanoes.

This makes the sea floor shallower in places.

This creates a greater level of upwelling — where cold ocean currents are forced to the surface.

This has allowed species to evolve without the influence of others from the mainland.

This has created a constantly changing landscape to which animals and plants are always adapting.

This creates hydrothermal vents which create a warmer and more nutrient rich localised environment.

This brings cool air, making the Islands milder and drier than the rest of the Tropics.

This brings water rich in nutrients to the surface which is needed by phytoplankton (primary producers).

All of these factors combine to create the distinctive characteristics of the Galapagos Islands. A wide variety of marine and terrestrial habitats are able to support rare plant and animal species and create a unique natural landscape.



Galapagos

← 1000 km →

Ecuador

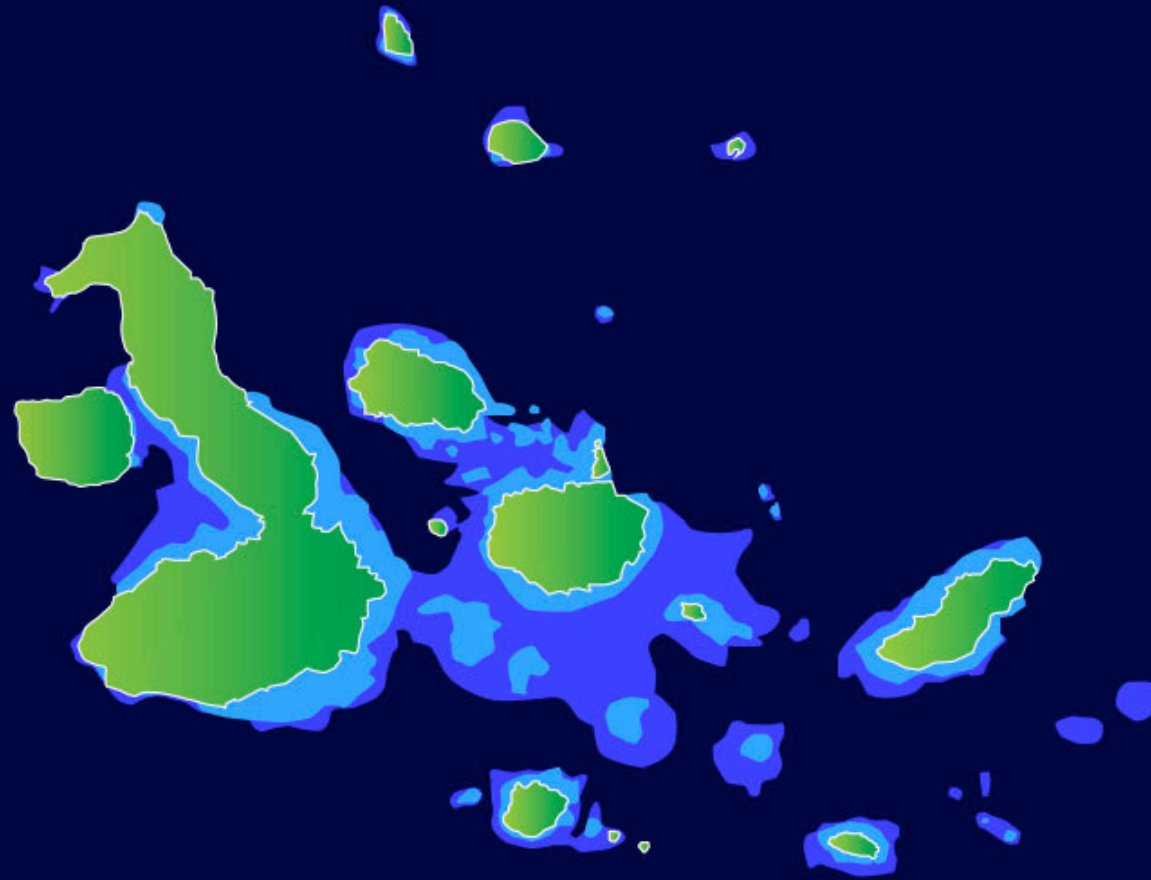
The Islands are located 1000km (600 miles) from the west coast of Ecuador.



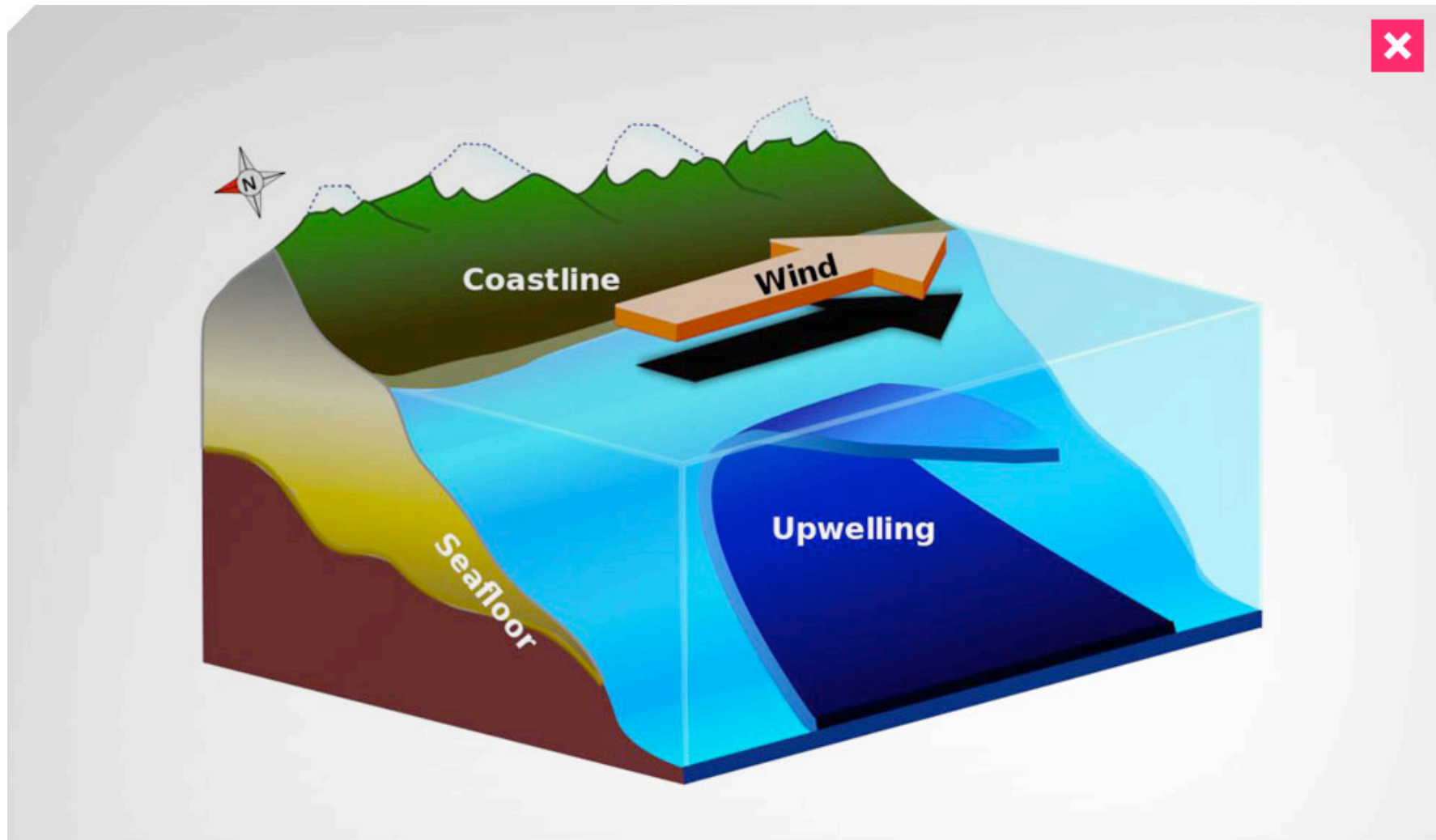
In Galapagos, species have evolved without the influence of other species from the mainland.



The tectonic movement causes plumes of superhot magma to rise to the surface, creating volcanoes.



The flow of magma has resulted in parts of the sea floor being shallower than others. This means some of the Islands are more connected.

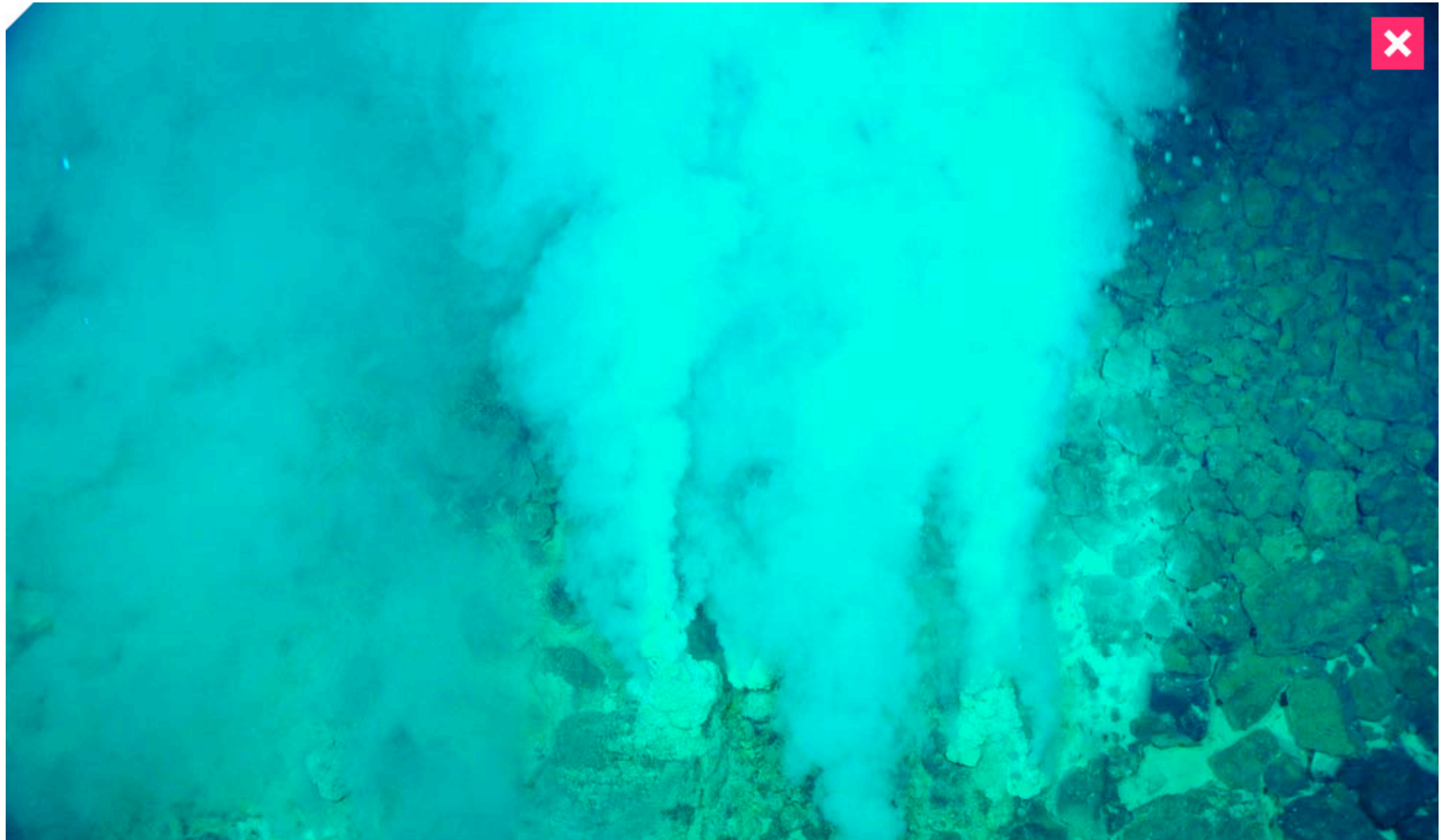


Cold ocean currents are forced to the surface by a greater level of upwelling.



Galapagos - a constantly changing landscape to which animals and plants are always adapting.





Hydrothermal vents create a warmer and more nutrient rich environment in the deep sea.



Cool air makes the Islands milder and drier than the rest of the Tropics.



Nutrient rich water is needed by phytoplankton (primary producers).