

Location of the Galapagos Islands and their ecosystem

- The Galapagos Islands are located in the Pacific Ocean, almost 1,000km from the coast of Ecuador in South America.
- The islands are in both the Southern and Northern Hemispheres with some parts of the islands on the Equator.
- They have a unique island ecosystem; they receive cool ocean currents creating a strange mix of tropical and temperate climates.
- This unique ecosystem combined with the often-extreme isolation of the islands has allowed a diverse range of animals and plants to thrive on the islands.



How did the islands form?

- The islands are formed by the Galapagos hotspot.
- In some parts of the world, the crust is so thin that hot magma melts the rock above it and breaks through the surface, this is a hot spot.
- The thin crust at the bottom of the ocean is most easily melted by magma, causing hot magma to rise and form underwater volcanoes.
- These keep erupting and growing over the hot spot and can eventually form an island.
- Several chains of volcanic islands have formed when tectonic plates move over the hot spots.
- The Galapagos Islands are still moving today, they move around 6cm to the South-East every year!



Hot spot breaks through crust to form an island.



The crustal plate is in constant motion, the island will eventually move off of the hot spot, thereby making room for a second volcanic island.



A third & fourth island form as the crustal plate continues to move over the stationary hot spot.



Conservation

- The Galapagos Islands are special because the wildlife and ecosystems that exist there are unique and cannot be found anywhere else on Earth. There are around 9,000 species on plants and animals living on the islands.
- Many of the plant and animal species discovered on the Galapagos Islands have not been found anywhere else in the world.
- 23 species of animals and plants are nearly or have already become extinct on the islands.
- This means that it is important to conserve the Galapagos Islands to protect the ecosystems, plants and animals that live there.
- The Galapagos Islands in a popular place for tourists, however, there are laws in place to prevent too many people living or visiting the islands each year.
- The islands, also have laws to prevent over fishing and to ensure farming is sustainable and does not damage the habitats found on the islands.

Key species found on the Galapagos Islands.

Banded Snake. 	Bull head shark 	Carpenter Bee 
Giant Tortoise 	Green Turtle 	Land Iguana 
Galapagos Penguin 	Rice Rat 	Galapagos Hawk 
Pink Iguana 	Fur Seal 	Galapagos Sea Lion 