

Key Knowledge:

Overview- Galapagos Islands

- The Galapagos Islands is an archipelago (group of islands) that are part of Ecuador.
- The Galapagos Islands consist of 13 major islands, 6 smaller islands and many very small islands called islets.
- The islands lie along the Equator in the eastern Pacific Ocean.
- The Galapagos islands were formed by Volcanoes millions of years ago. Some of the volcanoes are still active.
- The volcanos erupted and the lava cooled into rock which formed the islands. This process means the islands are volcanic islands.
- The landscape includes many mountains, craters and cliffs.
- The islands are so far from other land they are sometimes called 'world's end'.

Significance of the Galapagos Islands

- The Galapagos Islands are famous because of the scientist Charles Darwin.
- After studying the plants and animals on the islands in the 1800s, Darwin developed his theory of evolution.
- Darwin was not the first person to see the Galapagos Islands, but they were not a common destination before his visit.

Plants and animals

- The Galapagos Islands are so isolated that the plants and animals found on the islands are very unusual.
- Cactus forests grow in the dry lowlands, whilst in the uplands are covered with thick, moist vegetation, such as ferns and mosses.
- Giant tortoises were once so abundant on the islands that Spanish explorers named the islands for them.
- The Spanish word 'galapago' means 'tortoise.'
- The islands also have rare marine iguanas, which feed on seaweed.

People and Economy

- The Galapagos Islands belong to Ecuador, and most of the people living there are Ecuadorans.
- Some people live on the larger islands. Most of the islands have no people living on them.
- The islands have areas of farming and also attract many tourists each year.

Map of the Galapagos Islands.



Key Vocabulary:

Galapagos Islands	An archipelago that forms part of Ecuador.
Northern Hemisphere	The half of the Earth north of the equator.
Southern Hemisphere	The half of the Earth south of the equator.
tropical	From or relating to the area between the two tropics.
equatorial	At or near the equator.
vegetation belts	Plant life as whole within a certain area.
conservation	A prevention of wasteful use of a resource.
voyage	A long journey involving travel by sea or in space.
naturalist	Somebody who studies the natural world.
environmental regions	A region of the world with a similar environment and features.
tectonic plates	The rock plates that make up the surface of the Earth.
magma	Hot liquid rock found just below the surface of the Earth.
shield volcano	A broad domed volcano with gently sloping sides.
archipelago	An extensive group of islands.
hotspot	A small area with a relatively high temperature in comparisons to its surroundings.

Geographical Skills and Fieldwork

- Use a map or atlas to find the Galapagos Islands.
- Name some important features of the Galapagos Islands.
- Talk about the main features of the Galapagos Islands.

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 