

ISLAND HABITATS

ACTIVITY 3

As you saw in the film *Galapagos: Nature's Wonderland*, the work of volcanoes, winds, and waters have created many different habitats on the Galapagos Islands. Read about the habitats found on three of the islands, then use this information to match some of the animals and plants you saw in the film to their island homes.

FERNANDINA

Lava still flows on Fernandina, the archipelago's youngest island, which is mostly a bare rocky mountain sloping down to the sea. But this island's coastal waters are full of life. That's because it sits at the western end of the Galapagos, where the cold Cromwell Current brings in nutrients from across the Pacific Ocean.

SANTA CRUZ

The volcano that formed Santa Cruz Island has not erupted for more than a million years. Instead, its peak now condenses moisture in the cool winds blowing off the Humboldt Current, spreading a cloudy mist over the plants of the highlands, and triggers rainfall when the Panama Current brings humid winds to the island. In addition, on this island,

the volcano has left behind *lava tubes* — long tunnels carved long ago by hot flowing lava.

ESPAÑOLA

Española, considered the oldest of the Galapagos Islands, has been worn down to rocky sea cliffs and sandy beaches by millions of years of erosion. With no highlands to draw moisture from the winds, this island has only sparse plant life and an arid climate.

Identify the island (or islands) where you would expect to find the Galapagos plants and animals shown below. Circle **F** for Fernandina, **SC** for Santa Cruz, and/or **E** for Española. Be ready to explain in class why each plant and animal seems adapted to the island habitat you have chosen.

The wide variety of habitats found in the Galapagos has made this isolated chain of islands a model of *biodiversity* — a perfect example of how adaptation produces many different kinds of plants and animals within a habitat, and even more different kinds for each different habitat. Can you think of examples of biodiversity in the habitats of your region?

 <p>Marine Iguana This diving lizard lives on algae and seaweed, and can “sneeze” the salt from sea water out of its system.</p> <p>F SC E</p>	 <p>Waved Albatross This broad-winged sea bird breeds only in the Galapagos, nesting on rocky cliffs where it can easily launch itself into the air.</p> <p>F SC E</p>
 <p>Galapagos Cormorant After living thousands of years on a coastline where it can always dive for fish, this bird's wings have become too small for it to fly.</p> <p>F SC E</p>	 <p>Blue-Footed Booby This sea bird needs flat, rocky terrain for its breeding colonies, which can contain thousands of nests.</p> <p>F SC E</p>
 <p>Galapagos Penguin The only penguin found near the Equator, it needs cold waters and abundant sea life to survive.</p> <p>F SC E</p>	 <p>Amblypygid A relative of spiders, this subterranean creature feels for its prey with its long front legs.</p> <p>F SC E</p>
 <p>Scalesia A tree-size relative of the dandelion, this plant grows in dense groves on moist hillsides.</p> <p>F SC E</p>	 <p>Prickly Pear Cactus Unlike its shrub-size cousins in arid regions of North America, the Galapagos Prickly Pear can have a trunk and grow as tall as a tree.</p> <p>F SC E</p>