





#### Voyage across the Indian Ocean

The Indian Ocean covers 75,000,000 square kilometers.

To the north are the coastlines of India, Pakistan, and Iran, to the east Burma, Thailand, Malaysia, Indonesia, and Australia, and to the west Africa and the Arabian peninsula.

To the south, the waters of the Indian Ocean mix with those of the Antarctic Ocean, to the southwest, they meet the Atlantic, and to the southeast, the Pacific. The Indian Ocean contains many archipelagos: including Zanzibar, the Seychelles, the Maldives, the Kerguelen Islands, and the Crozet Islands.

## Activity

Take an atlas: locate the places mentioned in the text and place them on the map. Look for the names of the African countries that border the Indian Ocean.

### Activity

Do you know what an archipelago is? Do you know others that are not in the Indian Ocean?





Vasco de Gama, ready to debark at Calicut, in India, May 19, 1498 (Azulejos porcelain).

#### **Out to conquer the Indian Ocean**

As early as the 5th century B.C., navigators sailed the Indian Ocean between Southeast Asia and Madagascar to trade in herbs, medicinal plants, and condiments, then for silk. It was later, at the end of the 15th and beginning of the 16th centuries, that the southern sea lanes, close to where Raphaëla will be sailing, were used. At that time, new navigation inventions made sailing easier: taller ships called caravels, with many sails, maneuvered more easily thanks to the **stern-post rudder**. A ship's course could be set with a **compass**, positions fixed with the help of an **astrolabe**, and routes charted on the first maritime maps, the **portolano**.

Navigators organized expeditions to find new routes to the Indies where they sought spices, gold, and precious stones. The Portuguese were then the kings of the sea. On February 3, 1488, **Bartolomeu Dias** landed on the southern coast of Africa, 370 km east of the tip of the continent, at a place known today as Mossel Bay.



# Activities

From the text, pick out the inventions that facilitated the progress of navigation during the 15th and 16th centuries. Prepare a file or poster to compare the navigation tools used then with those that Raphaëla is taking with her now.

• Trace the itineraries of the various expeditions on the historic map.



In July 1497, another Portuguese explorer, **Vasco de Gama**, set off with four ships and one hundred and seventy men. They passed the Cape of Good Hope, then explored the southeast coast of Africa for five months. Continuing his course, Vasco de Gama arrived at the borders of the Moslem world, along what is now the coastline of Mozambique. Finally, on May 19, 1498, he arrived at Calicut, in India, after traveling some 20,000 kilometers.

The return was particularly difficult. The sailors had to deal with head winds for three months. Provisions ran low, food went bad, lice were everywhere. The crew survived on fresh fish, salted pork, rotting, weevil-ridden biscuits; dozens of sailors died of scurvy. When the ships returned to Lisbon at the end of the summer of 1499, only fifty-four crewmen survived. They were welcomed as heroes: the results were meager (they only brought back a small load of cloves, a bit of cinnamon, and a handful of precious stones), but the expedition had reached its goal, India!

During the 16th century, other maritime expeditions opened the door to the Indian Ocean. In August 1519, **Magellan** set sail with five ships and 265 men. He wanted to reach the "Spice Islands" by sailing west. He was killed during the voyage, in the Philippines. The crew left with the two remaining ships. In 1521, they reached the Molucca Islands in indonesia Archipelago where they bought spices. Finally, a single caravel, the Victoria, succeeded in crossing the Indian Ocean and took the passage to Europe past the Cape of Good Hope. The Victoria arrived in Spain on September 6, 1522, with only 18 men aboard, the first to circumnavigate the earth!

## Activity

Fill in this historical timeline with information you found in the text.

