Some navigational tools (used

during the Age of Discovery):



The magnetic compass helped indicate North, South, East and West.lt improved the safety and efficiency of travelling, especially by sea.

The astrolabe is one of the oldest of all altitude measuring devices. It was used to show how the sky looked at a specific place at a given time and it enabled sailors to determine latitude more accurately.





The **backshaft** allowed the navigator to stand back from the sun and work with the shadows.

The quadrant is shaped like a quarter of a circle. It was used by sailors to measure the height of Polaris, the Pole stars.





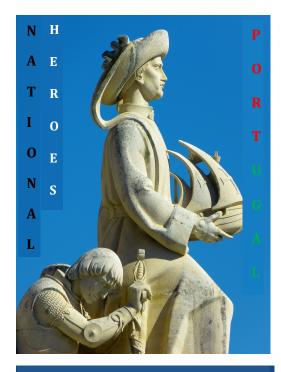


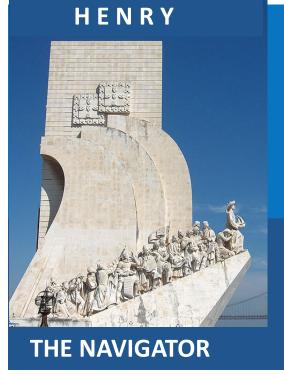
YOUNG HISTORIANS OF EUROPE

Agrupamento de Escolas de Rio Tinto n.º 3





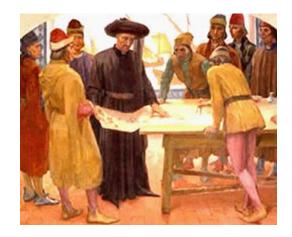




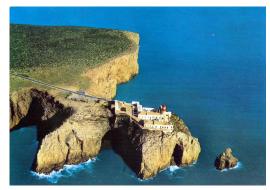
The Age of Discovery

Infante <u>D.</u> Henrique of Portugal, (4 March 1394 – 13 November 1460), better known as Prince Henry the Navigator, the fourth child of the Portuguese king John I, was a central figure in the early days of the Portuguese Empire and in the 15th-century European maritime discoveries and maritime expansion. Through his administrative direction, he is regarded as the main initiator of what would be known as the **Age of Discovery**.

The Age of Discovery, or the Age of **Exploration** (approximately from the beginning of the 15th century until the middle of the 17th century), is an informal term for the period in European history in which extensive overseas exploration emerged as a powerful factor in European culture and which was the beginning of globalization. It also marks the rise of the period of widespread adoption in Europe of colonialism and mercantilism as national policies. Many lands previously unknown to Europeans were discovered by them during this period, though most were already inhabited. From the perspective of many non-Europeans, the Age of Discovery marked the arrival of invaders from previously unknown continents.



Sagres navigational institute



Sagres Fortress



The caravel

Although Prince Henry never sailed on any of his expeditions and rarely left Portugal, he became known as **Prince Henry, the Navigator** because of his support of explorers, who increased the world's known geographic information through the sharing of knowledge and by sending expeditions to places previously uncharted.

Prince Henry founded a **navigational** institute at Sagres on the southwesternmost point of Portugal, Cape Saint Vincent—a place ancient geographers referred to as the western edge of the earth. The institute was designed to teach navigational techniques to Portuguese sailors, to collect and disseminate geographical information about the world, to invent and improve navigational and seafaring equipment (such as the caravel, a new type of ship), and to sponsor expeditions. Prince Henry's school brought together some of the leading geographers, cartographers, astronomers, and mathematicians from throughout Europe to work at the institute. When people returned from voyages, they brought back with them information about currents, winds—and could improve existing maps and sea-travelling equipment.