

EXPLORATION AND DISCOVERY



1. Use in the classroom or as homework

This module contains a sequence of maps showing the early European voyages of discovery. They start with the Portuguese voyages adown the coast of Africa in the 15th century, and end with the Magellan expedition which circumnavigated the world in 1519-22. Their aim is to provide the historical background to the Age of Discovery.

Please see **Appendix A**, below, for more on what the module is about.

The module seeks to contribute towards the teaching and learning of history at Key Stage 3 of the English National Curriculum, and a series of suggested activities are included below to help in this (please see **section 3**).

Key Concepts and Activities:

Key Concept	Activity
1.1.: Chronological Understanding	1 - Chronology 2 - Analysis
1.2.: Cultural, ethnic and religious diversity	4 - "Know How" 5 - Key personalities 6 - Europe and China 7 - What did they discover?
1.3.: Change and continuity	
1.4.: Cause and consequence	2 - Analysis 3 - Why did it happen? 4 - "Know How" 5 - Key personalities 6 - Europe and China
1.5.: Significance	1 - Chronology 5 - Key personalities

The controls are very simple.

- The date label shows the date of the map on the screen, and the “forward” and “back” buttons on either side allow you to navigate through the sequence of maps.
- The “info” button, below the date label, switches information hotspots on, and the “info off” button switches them off.

These controls allow the module to be used in several ways. If what is required is a simple background summary to the history of early European exploration and discovery, a quick run through the map sequence, using the “forward” and “back” buttons, will give the class an attractive, visual overview,

allowing a grasp of the key events and processes involved in the topic. To help you in this, **Appendix B** gives a commentary on the maps.

If on the other hand a more in-depth look at the topic is required, these maps will provide an effective tool, either as a background resource or as the main focus for the topic. The resource can be used on an interactive whiteboard or on desktops with small groups of pupils, or as homework on pupils' own machines at home. The notes below (see **section 3**) will help achieve this.

2. Purpose

The purpose of the unit is to give pupils an overall understanding of the early European Age of Discovery from the early 15th century down to the first circumnavigation of the world in 1519-22:

- What were the reasons for the Age of Discovery?
- Why were Spain and Portugal the pioneers?
- Who were the key personalities involved?
- Which were the key voyages?
- What technological and navigational challenges had to be overcome?
- What did the voyages actually achieve?

To fulfil these objectives in a way that fits in with a teacher's own approaches, the modules have been designed to work at two levels, (1) to provide an overview of the topic, and (2) to allow in-depth enquiry work by the pupils.

1) Overview

A quick run through of this module will offer a clear visual overview of the topic, and therefore provide the required historical background for the study.

2) Depth

There is a large amount of information about the topic stored in the maps and text boxes of this module. These will enable pupils to conduct their own enquiries, and allow fruitful consideration of a range of questions and issues.

3. Student activities:

Below is a selection of exercises, one or more of which you may decide to undertake with your pupils depending on their age or level of ability, and your time commitment to this topic.

The activities are all relevant to the English National Curriculum KS 3 Programme of Study (see above for a table showing which activities match which key concepts). In undertaking them, pupils will be involved in enquiry work, either as individuals or as a group. They will be asked to identify and investigate specific historical questions or issues, and reflect critically on historical questions or issues.

To access the huge amount of information linked to the maps, pupils will need to use the “info” button, below the date box, which switches the information hotspots on. The “info off” button next to it switches them off again.

1. Chronological Activity

EITHER

Place the following in chronological order:

Vasco da Gama arrives in India
Magellan’s voyage
The first voyage of Christopher Columbus
Bartholomew Diaz rounds the Cape
The Treaty of Tordessillas

OR

Draw a timeline of early European exploration.

Place key events on it.

[No right answers here, but pupils have to give reasons for including or excluding events. A possible list might be:

Henry the Navigator sets up base at Sagres; Cape Badajoz is rounded; Cape Verde is rounded; Cape of Good Hope is rounded; Columbus’ first voyage; Vasco da Gama arrives in India; the Treaty of Tordessillas; the founding of Portuguese Goa; Magellan’s voyage.]

2. Analysis

[The purpose of this exercise is to encourage students to think about the nature of historical processes – and how that nature changes over time: different factors at play, different kinds of events, different results, and so on.]

If had to divide into two or more phases, where would you put the dividing line(s)?

[Again, no right answers here, but pupils have to give reasons for their decision. One answer might be: Phase 1: – the Portuguese crawl down Africa; Phase 2 – the transoceanic voyages]

What were the distinguishing characteristics of each phase?

What was achieved in each phase?

OR

The Portuguese probing down the African coast took several decades. Why did it take so long, when the following voyages which spanned the oceans happened so quickly?

3. Why did it happen?

List the various reasons given in the module.

Are the reasons given sufficient, do you think?

Can you think of any others there might have been?

What was it about Europe at that time that made these voyages occur?

What was it about Portugal that made this small country the pioneer?

What do YOU think were the two most important causes for the European Age of Discovery?

4. "Know-how"

What new technologies became available prior to the voyages to make oceanic exploration possible?

Where did they come from – is it possible to claim that the Age of Exploration was a purely European achievement?

After the voyages of exploration had begun, what significance challenges had to be overcome? What were the key steps in overcoming these challenges?

5. Key personalities

EITHER

Who, do you think, were the three most important figures in the early Age of Discovery?

What did each one contribute to the process of exploration?

What qualities did they display which helped them make their contribution?

What was it about these times (do you think) which threw up these people?

Which of these would have been the most famous at the time, do you think?

Would he be regarded as the most important now? (If not, who?) Give reasons for your answers

OR

Look at one of the voyages of either da Gama or Magellan.

List some feature that this tells us about these early voyages of exploration.

How dangerous were they? (To help answer this, look at some other voyages as well.)

What qualities do you think the commanders of these expeditions needed?

OR

Would there have been an Age of Exploration if Prince Henry "The Navigator" hadn't lived passed his youth?

6. Europe and China

Just before the Portuguese started on their long-distance voyages, a famous Chinese admiral had led a series of great expeditions across vast distances. His name was Zheng He.

Research the career and achievements of Cheng Ho.

List the similarities between his voyages and those of the Europeans.
List the differences.

Why (do you think) did Chinese exploration come to a stop, whilst European exploration did not?

What do the differences and similarities between Chinese and European exploration tell us about the differences and similarities between Europe and China at this period?

7. What did they discover?

What did the Portuguese explorers encounter on the coast of Africa: ignorant savages or civilized peoples?

What did the Portuguese explorers encounter on the coast of India: ignorant savages or civilized peoples?

What did the Spanish THINK they had encountered when they first came across the New World – and how long did it take them to realise that they were wrong?

APPENDIX A: What is this module about?

This module covers the early period of European exploration. At the start of it, Europeans, most of whom were firmly entrenched in the cultural horizons of the Medieval period, had only the vaguest awareness of what lay beyond the borders of Christendom. By the end of it, European ships had circumnavigated the globe, and had discovered a vast landmass which was entirely new to them.

Pupils in many history departments undertake a depth study on a significant explorer. This module provides them with an overview of the period of early exploration, into which they can fit the details of the chosen explorer's life and voyage(s). It should enable them to understand the broader historical context.

The main thrust of the module is that Christopher Columbus didn't just set sail one fine day and change the world. The world was already changing, and this was not down to just one individual, or one country – or even one continent. The Age of European Exploration rested on technological achievements from the Middle East (the astrolabe, the lateen sail) and China (the compass, gunpowder). However, it was distinctively European factors that led to a process of huge historical importance, in which these worldwide innovations did indeed change the world. This module seeks to introduce pupils to these issues. It also hopes to encourage them to think about the role of key individuals (were they key?) as against more general factors.

APPENDIX B: Commentary of Maps

The following notes give background details to each map in the sequence. If you do not want to go into depth, and just give a brief overview of the topic, the first paragraph (in bold) for each date will give you a summary of the information.

Some questions are included for discussion.

Map 1: Europe c. 1400

In the late Middle Ages, Europeans knew very little about the wider world. Travellers such as Marco Polo had brought back reports of great civilizations in Asia, but the rise of the Ottoman empire meant that a great Muslim power was increasingly blocking Europeans from contact with peoples (and traders) further east.

Although Europeans were importing an increasing quantity of trade goods from Asia and Africa – spices, silks, cotton textiles and so on - this rich trade was not in European hands.

Spices in particular were items of great value to Europeans – they were used to make food taste better (though not to cover the smell of rotten food, as is sometimes claimed), and for medicines. A reliable supply was seen as a growing necessity as Europeans became wealthier and more people were able to afford them.

Europe was getting wealthier in the later Middle Ages. Trade was expanding, there was a rising demand for luxury goods, and the trade routes bringing commodities into Europe were getting busier. To the south and east these trade routes were in the hands of Muslims, between whom and Christian Europe lay a chasm of hostility. Therefore the only direction for expansion was the north and west – but here was the open sea. Already in the 14th century there were signs of the first probings into the wide ocean – the growing demand for fish was carrying French and English fishermen to the fishing grounds off the coast of North America, whilst sailors and traders (Arab first, European later) had been visiting the Canary Islands, off the coast of Africa, for 100 years or more.

The rise in wealth was accompanied by a new interest in learning. Arabic science and technology was becoming increasingly known in Europe, as was the learning of the ancient Greeks and Romans (often from Arabic sources). Europeans were becoming more and more thirsty for new knowledge, to know more about the world.

Portugal

Portugal was a small country on the south west coats of Europe. It had a long sea coast, with plenty of good harbours; it produced plenty of good seamen. As a Christian country which had been carved out of Muslim territory during the Middle Ages. It therefore had a tradition of aggressive expansion into Muslim lands.

The Portuguese contact with Muslims was by no means all hostile. The Portuguese had been exposed to Islamic civilization for many centuries, and had a tradition of learning from their Muslim neighbours. Muslim mathematics, cartography, instrument-making, ship-design and navigation (including devices such as the astrolabe and quadrant) were to play a key part in the so-called European Age of Discovery.

In the late Middle Ages, the Portuguese were filled with a crusading spirit to spread the Christian faith and roll back the realm of Islam. They had heard rumours of a Christian king, “Prester John” (“John the Priest”) who lived in the heart of Africa (rumours and fables of Christian kings and cities of gold were to play a large part in European expansion) – an alliance with him might help them in their fight against the Muslim powers. Also, the Portuguese shared in the expanding economic life of the Europe of the late 14th and 15th centuries, and were influenced by a growing commercial ambition. After their conquest of the North African town of Ceuta, they began to think about opening up Africa to Portuguese trade.

Finally, in the 15th century this small country was ruled by a remarkable royal family, whose members have since been known as “the Illustrious Generation”). The Portuguese royal court was a centre of European science and learning. The policies of the king and his advisors were aimed at controlling the North African coast, both to control the corsairs and to dominate trade; and they became increasingly aware of the possibilities of expansion further afield. The Portuguese kings saw in the expansion of trade and empire a means of gaining the wealth to balance the power of their powerful and rebellious nobility.

The member of this royal family whose name became best known in European history was not a king, but one of the princes – Prince Henry, “the Navigator”.

He was determined to discover what lay to the south of the Sahara desert, and to see if there was a way around the south of Africa to the Spice Islands in the East. He set up his headquarters at Sagres, an isolated spot on the Atlantic coast, and attracted cartographers, instrument makers, astronomers and shipbuilders there.

He commissioned the early voyages of exploration.

NW African coast

The Atlantic coast of Africa going south from the Straits of Gibraltar is deserted and barren. There are no harbours to replenish supplies at. Also, the prevailing winds in that region are from the south west- which, in the days of sail, meant that a ship could fly down the coast to the south, but find it difficult if not impossible to get back home – not an attractive outlook for sailors.

Map 2: The Crawl down the coast

The Portuguese prince Henry the Navigator commissioned a series of expeditions into the Atlantic and down the coast of Africa, each one probing a little bit further. All the time these Portuguese explorers gathered more information about the African coast, as well as about long-distance navigation and oceanic winds and currents.

By the time of Henry's death these expeditions had proved that profit could be made by trade with the Africans, and so they continued, until at last the Portuguese sailor Bartholomew Dias rounded the Cape of Good Hope.

NW African coast

One of the crucial things that the early Portuguese sailors discovered was that, whilst the winds along the coast were from the north west, making it slow and difficult (if not impossible) for sailing ships to battle against the wind back home again to Portugal, if one sailed further out into the Atlantic one could catch winds that went in the opposite direction – carrying the sailing ships northwards to European shores.

Cape of Good Hope

In 1488 Bartholomew Dias sailed round the Cape of Good Hope without seeing it – he only realised that he had done so when, sailing north, he made landfall at a coast facing east, not west.

This was a highly important moment for the Portuguese (and Europe) as it proved for the first time that the Indian Ocean and the lands to the east were accessible by sea from Europe. It opened the way to a radical re-drawing of trade routes between east and west.

Map 3: The New World

The rounding of the Cape of Good Hope by the Portuguese showed that trade with the East was possible by that route. Now, however, the Spanish began getting involved in exploration, trying to find a more direct way to Asia by heading straight across the Atlantic. The first of these expeditions, under Christopher Columbus, stumbled across a continent previously unknown to Europeans.

Spain had only become a united country after 1469, when queen Isabella of Castile married king Ferdinand of Aragon. These two monarchs set about creating a strong, centralized nation-state, and in conquering the last Muslim state in Spain, Granada, thus bringing the entire country under their Christian rule.

As Portugal was seeking to outflank the Muslims in getting at the riches of the east, so it made sense for Spain to outflank Portugal in pioneering a shorter, more direct route to those same riches.

Apart from national rivalry, the Spanish shared many similar motivations for expansion as the Portuguese – a crusading tradition against non-Christian foes, exposure to Muslim pirate attack, but also centuries of exposure to

Islamic science, geography and mathematics which made the inhabitants of this corner of Europe more capable of long-distant voyaging than the rest of Christendom.

Christopher Columbus

1451? - 1506

Christopher Columbus was a Genoese sailor who had spent many years lobbying the kings of Portugal and Spain for sponsorship to carry out an Atlantic crossing - his idea was that by going west you could come to the lands of the east much more quickly than going round the Cape of Good Hope.

He was finally successful in January 1492, and a small fleet of three ships left August 3rd 1492. On October 12 they sighted land. This was in the Bahamas (it's not known exactly where). Thinking he had landed in Asia, Columbus planted the Spanish flag and then sailed on. He landed on Cuba on the 28th October, which he thought was Japan.

After a stormy passage home, Columbus arrived to report his discovery of a westward passage to Asia. Columbus undertook three more voyages, but never realised he had discovered a whole new continent!

Map 4: The Indies

With Bartholomew Dias' rounding the Cape, and then with Columbus' apparent discovery of a more direct way to the East and its wealth, the rivalry between Portugal and Spain heated up. In 1494 they agreed to divide the world between them in the treaty of Tordesillas.

The Treaty drew a line on the map of the globe 370 leagues west of the Cape Verde Islands. The lands discovered to the east of that line would be Portugal's; those to the west would be Spain's.

Da Gama's voyage

The Portuguese stepped up their efforts by sending Vasco da Gama on the first European voyage to India.

Vasco da Gama (1460-1524) was ordered to sail for India and stake Portugal's claim to that land. He set sail with a fleet of four vessels – two carracks, one caravel and a storeship – on the 15th July, 1497. After stopping at the Azores (26th July), the Cape of Good Hope (November 7th), and various points along the southern and eastern African coast, da Gama's fleet reached Calicut, on the Indian coast, on May 20th 1498.

Da Gama failed to make a trade treaty with the ruler of Calicut – the trinkets he had brought were of no interest in India; moreover, the Muslim merchants who had dominated the Indian Ocean maritime trade for centuries were naturally hostile to these newcomers.

Map 5: Voyages

With the turn of the century, voyages of discovery multiplied. Navigators in the service of Spain probed the American coasts, only gradually realising that they had discovered an entirely new continent. Meanwhile the Portuguese consolidated their hold on the trade routes to the East with their first fortified bases in the Indian Ocean.

Amerigo Vespucci (1454-1512) was, like Columbus, an Italian navigator in the service of Spain. In 1499 and 1501 he made two voyages which charted the coasts of South America and the Caribbean. These voyages convinced Vespucci that this coastline was not Asia, but a new continent. Shortly after his return, a German map-maker drew a map of South America, calling it "Amerigo's land" – and the name "America" stuck.

Goa, India

After Vasco da Gama's expedition had visited India in 1498, subsequent voyages had proved that there was real wealth to be made in the trade with the region. Naturally this led to war with the Indian rulers, to atrocities on both sides, and, under the leadership of Afonso Albuquerque, to the establishment of an armed Portuguese base at Goa in 1510. From here Portuguese commercial and diplomatic contacts spread outward into the neighbouring Indian states.

Map 6: The East Indies

The establishment of a fortified trading base on the Indian coast, at Goa, had no sooner been achieved than the Portuguese were heading further east, to capture the Spice trade at its source, in the Spice Islands themselves. In this they failed, but in the process they laid the foundations for a far-flung system of trading bases throughout the eastern seas.

Molucca

The Moluccas are a major source of spices; indeed, these ARE the fabled Spice Islands.

Map 7: Magellan

The rivalry between Spain and Portugal to get at the Spice Islands led to the first circumnavigation of the globe, barely twenty years after the first rounding of the Cape of Good Hope. The expedition led by Ferdinand Magellan, a Portuguese in the service of Spain, was an amazing – and tragic - achievement, a fitting end to the first dramatic phase of the European Age of Expansion.

Ferdinand Magellan (1480-1521) was a Portuguese nobleman who gained experience in the East as a soldier under Alburquerque. After Magellan's return home (1517), he fell out with the king of Portugal, and offered his services to the king of Spain.

By this date it was widely (but by no means universally) recognized that the lands found across the Atlantic were a new continent, and not Asia. This had

come as a disappointment to the Spanish, who had hoped that the fabled riches of Asia were in their hands.

The Spanish had not given up hope that the Spice Islands might still be reached directly, however, although at a longer distance than previously thought. The king of Spain therefore commissioned Magellan to find a westerly route to the Spice Islands for Spain. Magellan set sail with five ships on September 20th, 1519.

On October 21st the three remaining ships of the expedition entered what would later be called the Straits of Magellan and entering the Pacific on November 8th.

The crossing of the Pacific was a gruelling passage of 99 days, in which many of the crew died of hunger. Finally, on February 19th 1521, the ships reached Guam.

They left Guam on March 9th, sailing for the Philippines, which they reached on the 16th March. By this time the expedition had only 150 crew left – and soon they were to suffer another loss. Having made alliances with some local rulers, and converted one to Christianity; Magellan got involved in some hostilities between them, in which he was killed on April 27, 1521.

Finally, on September 6th, 1522, one ship and eighteen crew arrived home in Spain. 232 sailors had been lost on voyage, including their commander.

The voyage was the first to circumnavigate the world. On the way it had proved that the Pacific was not just a few days' sailing journey across, but a giant ocean, far larger even than the Atlantic. Magellan's route was too long and hazardous for commercial purposes.