

Reasons for European exploration

The southern African society was at the height of its power at the same time as the Renaissance was taking place. Europeans knew very little about Africa at this stage in European history but were always very curious about Africa. There were a number of reasons that made them want to explore and helped them to do this. These attempts to explore the world are known as the 'voyages of exploration'.



The European Renaissance

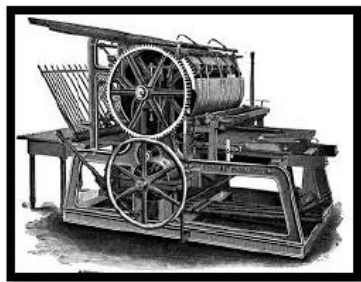
During the 15th and 16th centuries (1600-1700) The European Renaissance was at a turning point in a conservative time. People did not look further than their own towns or villages, and they didn't like new ideas about things. The Renaissance was a time when people were encouraged to look outwards for new and better ideas as well as new places to trade. It involved the development and advancement of literature, art, politics, religion

and science. A growing interest in the world and curiosity was an important part of the Renaissance and one of the key reasons for European exploration.

The Renaissance resulted in a number of inventions. Some of these inventions changed the world forever. Two of the most important inventions were the printing press and the telescope. The printing press allowed people to print pamphlets, news sheets and books, in large numbers. Because written language was more freely available, more people learnt how to read and write and because of this, people's knowledge of the world increased.

The Renaissance produced a number of great scientists and mathematicians. The two we will learn more about are Leonardo Da Vinci and Galileo Galilei.

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Printing Press
Invented by Johannes
Gutenberg

Telescope
Invented by Galileo
Galilei



Unit : 2

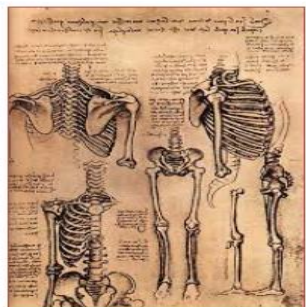
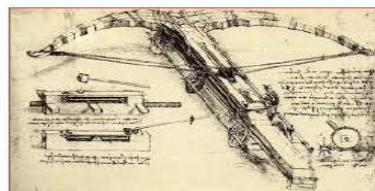
Leonardo da Vinci (1452 – 1519)

Leonardo da Vinci is one of the most famous Renaissance figures. He was born in Italy and is most famous for painting many great works of art like the Mona Lisa and The Last Supper. Leonardo is also famous for an amazing variety of other talents: He was a sculptor; He was involved in architecture (design of buildings) and; He was involved in geology, engineering and the military arts.



Due to the fact that Leonardo had so many skills in different areas, he was considered to be a genius. In his spare time, he did drawings of parachutes and flying machines that looked like inventions of the 19th and 20th centuries. He also made detailed drawings of the human body which are still highly regarded today.

If you would like to learn more about Leonardo Da Vinci then follow this hyperlink:
http://www.ducksters.com/biography/leonardo_da_vinci.php



Vocabulary

Engineering: is the study and practice of using mathematics and science to do practical things such as designing and building structures, tools and machines.

Geology: is the study of the physical structure of the earth and how it has changed over time. Geologists gain this knowledge by studying rocks.

Pendulum: is an object that is hung so that it can swing freely.

Astronomy: is the study of the stars and the planets in the universe.

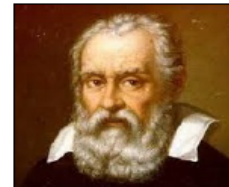
Astrologer: is a person who studies the movements of the sun, planets and moon and then links them to human behaviour and activity.

Merchant: is another word for a trader.

Missionaries: are people sent out to do work of the church or religious group, especially in the Christian religion.

Galileo Galilei (1564 – 1642)

Galileo Galilei was born in 1564 and was an Italian scientist and mathematician. Galileo worked on a number of different experiments. These included experiments on the speed at which different objects fall, mechanics and work around pendulums.



Galileo is also famous for building a powerful telescope. With this telescope, he made many discoveries in the field of **astronomy**. He discovered mountains and valleys on the surface of the moon, sunspots and the four largest moons of the planet Jupiter. This work on astronomy is what made him famous and he was appointed court mathematician in the city of Florence.

Galileo made the church very angry in 1614 by saying that the sun was at the centre of the solar system. This was revolutionary at the time as most people, especially the churchmen, believed that the earth was in this central position. He was forbidden by the church in 1616 from teaching or telling anyone about his theories. For more information about Galileo, visit the following site:

<http://www.galileo.usg.edu/galileo/>

Unit :3

New ideas and knowledge

Stories of Leonardo and Galileo are examples of how people's view of the world was changing. They showed the great possibilities that existed for discovery. One of the most important reasons for European exploration was the new ideas and knowledge of the time. It could be said that the most important of these was the new approach of the Renaissance. This was the desire to find out more about the world and the people who

lived in it. This also led to many discoveries in literature, art and science and it was a reason for the voyages of exploration. Many other ideas also came from outside of Europe namely the Arab Muslim world. An example of this is the Astrolabe, which was a device that helped people to navigate on land. This was used by Arab traders and astrologers for many years. It was later adapted by the Portuguese to be used on the seas.

The most famous of European traders who travelled to the East and shared their knowledge of what they saw was Marco Polo. Marco was a merchant who travelled to the East and China. Stories of his travels became best sellers as they inspired others because of these stories were of great wealth and opportunity in the East. He also came back with many ideas.



The improvement in maps also led to more exploration. This is because more people were travelling and the Arabian maps were being used by Europeans. These new maps made it easier and safer for people to sail off the coast of Africa.

Inventions

A number of inventions were very important reasons for European exploration. These inventions included the following:

- the magnetic compass
- the caravel
- gunpowder



Gunpowder

The Chinese invented gunpowder. In the 13th Century knowledge of gunpowder spread to Europe. By the time of the voyages of discovery in the 15th Century, Europeans had developed canons and firearms using gunpowder, which they put on ships. They then used these weapons to attack and conquer the people that they met on their voyages.

The Magnetic Compass

The Europeans used the magnetic compass to help them find their way on their voyages of exploration. The magnetic compass was first invented by the Chinese. The compass and the astrolabe helped sailors to figure out where they were and where they were going so that they could stay on the right course. They did not have to stay in sight of land to know where they were going. This meant that they could use the winds that blew far from land to go where they needed to go.

The Caravel

Until the 1400s (13th century), the Europeans did not have ships that were able to travel across oceans. To solve this problem, they started to build Caravels. These ships had two masts and two triangular sails. The Europeans copied the idea of the way the sails worked from the Arab trader's ships called the dhows. The sails made it possible for the sailors to make better use of wind to get their ship to move.

Spreading the Christian Religion

Religion played an important part in the growth of exploration. Religion was important to the Europeans, especially Christianity. They felt they needed to reform and convert every individual they came into contact with into Christianity. During this time, Christianity became the first religion to spread around the world.

European explorers had direction and navigation. They were very religious and relied on their faith to get them through their rough voyages. They spread their beliefs and religion. By the 1500s, Europeans were travelling by sea to almost every part of the world. Missionaries followed the European traders, colonists and conquerors.

The European trade route to the East via southern Africa

The Europeans had seen the valuable goods that came from the East namely the spices and silk. The trade of these spices and silk was controlled by the Arab traders. Once the spices and silk reached Europe, the Italian city states took over control. These Italian city states became incredibly rich from this trade. Other European nations also wanted to find a way to the East so that they could also benefit from the spice trade. The Portuguese nation was one of these. With new knowledge and ideas as well as new inventions this was possible.

