

Ancient Alexandria



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Bibliotheca Alexandrina

Ancient Alexandria

Carole Escoffey

Illustrations Flora Cavoura



The Alexandria and Mediterranean Research Center

CONTENTS



Alexander the Great **6**



The Foundation of Alexandria **8**



The Ptolemies **10**



Queen Cleopatra VII **12**



The Pharos of Alexandria **16**



The Legacy of the Pharos **18**










The Library and the Mouseion of Alexandria **20**



Science **22**



Poetry, History and Philosophy **26**

	Daily Life	28
	Games and Festivals	32
	Trade and Industry	34
	Food and Agriculture	36
	Cults and Religion	38
	Monotheism	42
	Roman Rule	44
	Glossary of Names	46
	Index	48

ALEXANDER THE GREAT

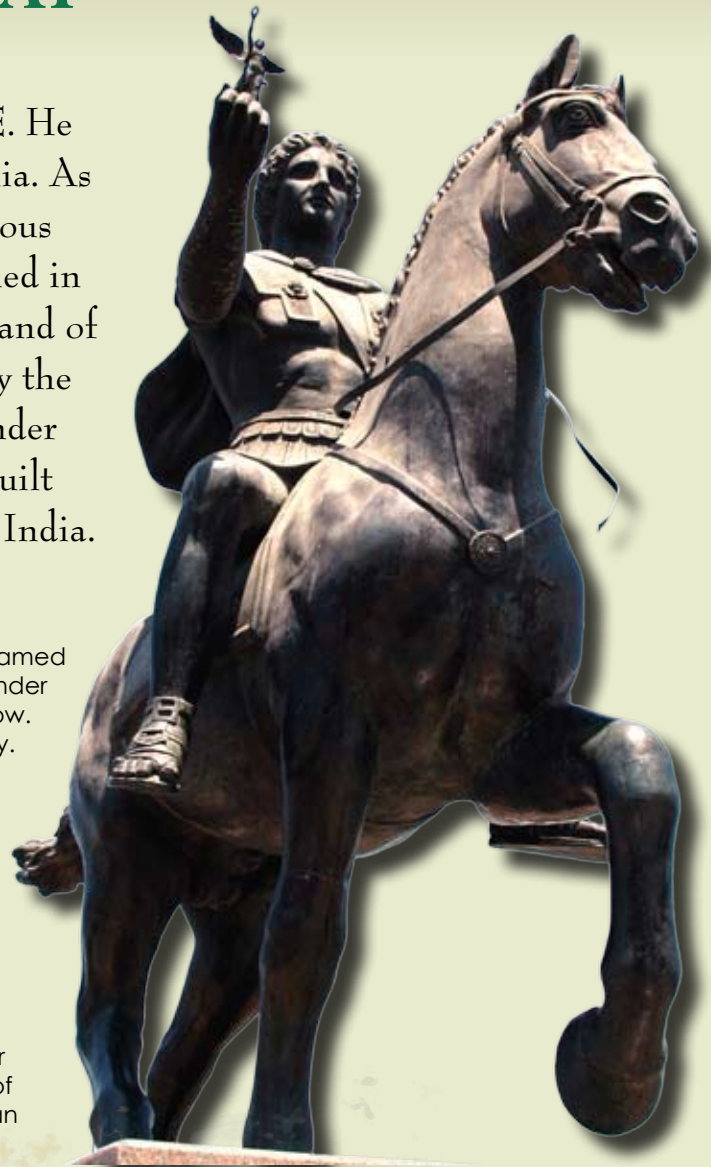
Alexander the Great was born in 356 BCE. He was the son of King Philip II of Macedonia. As a youth, Alexander was taught by the famous Greek philosopher Aristotle. When King Philip died in 336 BCE, Alexander became king of Macedonia and of Greece which had been conquered by his father. By the time of his death at the age of thirty-three, Alexander had conquered the powerful Persian Empire and built a gigantic new empire which reached as far east as India.

ALEXANDER'S HORSE

When he was young, his father gave him a black horse named Bucephalus. This horse would not let anyone mount it, but young Alexander noticed that this was because the horse was afraid of its own shadow. So he turned the horse to face the sun and was able to mount it easily. Bucephalus became his friend and close companion for many years.

THE PERSIAN EMPIRE

When Alexander was born, the most powerful empire on Earth was the Persian Empire, which lasted from about 648 to 330 BCE. It stretched eastwards as far as central Asia and westwards into Egypt and parts of Libya. The Persians were the greatest threat to the ancient Greeks. However, in less than eight years, Alexander vanquished the Persian Empire. The decisive blow was the Battle of Issus in 333 BCE, where Alexander defeated the much larger Persian army, forcing the Persian emperor, Darius III, to flee.



The Battle of Issus

ALEXANDER THE SON OF AMMON

Alexander traveled westwards into the desert as far as the Egyptian oasis of Siwa. There, he consulted the oracle at the temple of the god Zeus Ammon. This oracle told him that he was the god's son.

On this silver coin Alexander is depicted with ram's horns which were associated with the god Ammon.



ALEXANDER IN EGYPT

In 332 BCE Alexander the Great invaded Egypt, which at that time was part of the Persian Empire. However, Egypt's Persian rulers were so unpopular, that the Egyptians welcomed Alexander to be their new king instead. He was crowned king in Egypt's capital, Memphis. Next, Alexander traveled northwards with his army and set up camp on the north coast near the village of Rhakotis, where he founded the city of Alexandria in 331 BCE.

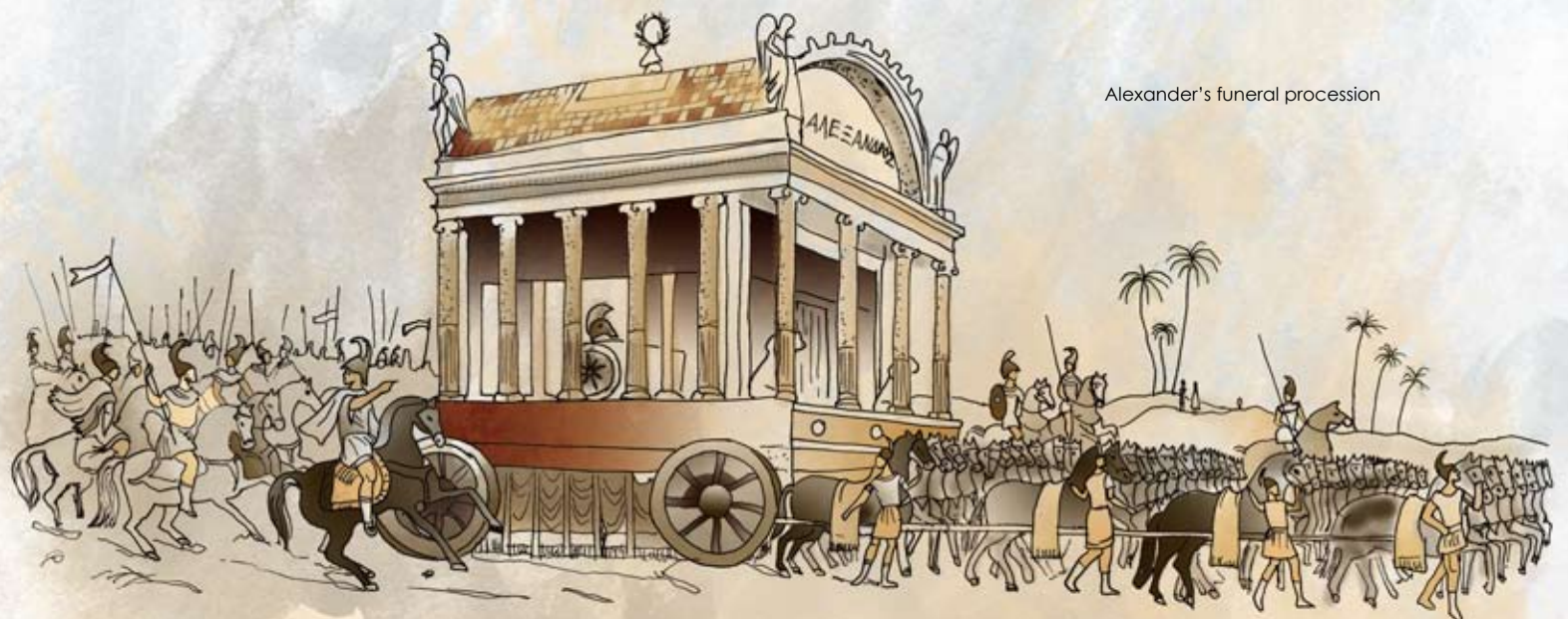
FOUNDER OF CITIES

Alexander founded about twenty cities which were named after him. Some of these were intended to be cities, such as Alexandria in Egypt, whilst others were built as military settlements which then gradually grew into towns.

THE DEATH OF ALEXANDER

Alexander the Great left Egypt before Alexandria was built, so he never saw the city. He died eight years later in 323 BCE in Babylon, in Mesopotamia and his body was brought back to Egypt by one of his army generals, Ptolemy. He was firstly buried in Egypt's capital Memphis for a few years, and then he was reburied in Alexandria which became Egypt's new capital city.

Although Alexander's tomb was very lavish and beautiful, over the centuries it disappeared and today no-one is sure exactly where it was.



Alexander's funeral procession

THE FOUNDATION OF ALEXANDRIA

ALEXANDER'S DREAM

It is said that whilst Alexander and his army were camped near the small Egyptian fishing village of Rhakotis, Alexander had a dream. He dreamt that Greek poet Homer appeared before him and told him that the mainland opposite the Island of Pharos would be an excellent place to build a city. Upon awakening, Alexander immediately gave orders for a new city to be built there which would be named after him: Alexandria.



Homer appeared to Alexander in a dream.



THE HEPTASTADIUM

The Island of Pharos was joined to the mainland by a mole, a thick wall built in the sea called the Heptastadium because it was "seven stadia" long. To the east of the Heptastadium was the Great Harbor, and to the west, the Eunostos Harbor, or "Harbor of Safe Return". Over the centuries the water on each side of the Heptastadium became filled with silt. Today, this area has become solid land and so Pharos is no longer an island, but joined to the mainland.



Building the Heptastadium



A WISE CHOICE OF SITE TO BUILD A CITY

According to the Roman historian, Arrian, who wrote a famous account of Alexander's life, after the conqueror had been crowned king of Egypt in Memphis, he sailed northwards with his army, down the River Nile and around Lake Mareotis, until he reached the north coast where he decided to build Alexandria in 331 BCE.

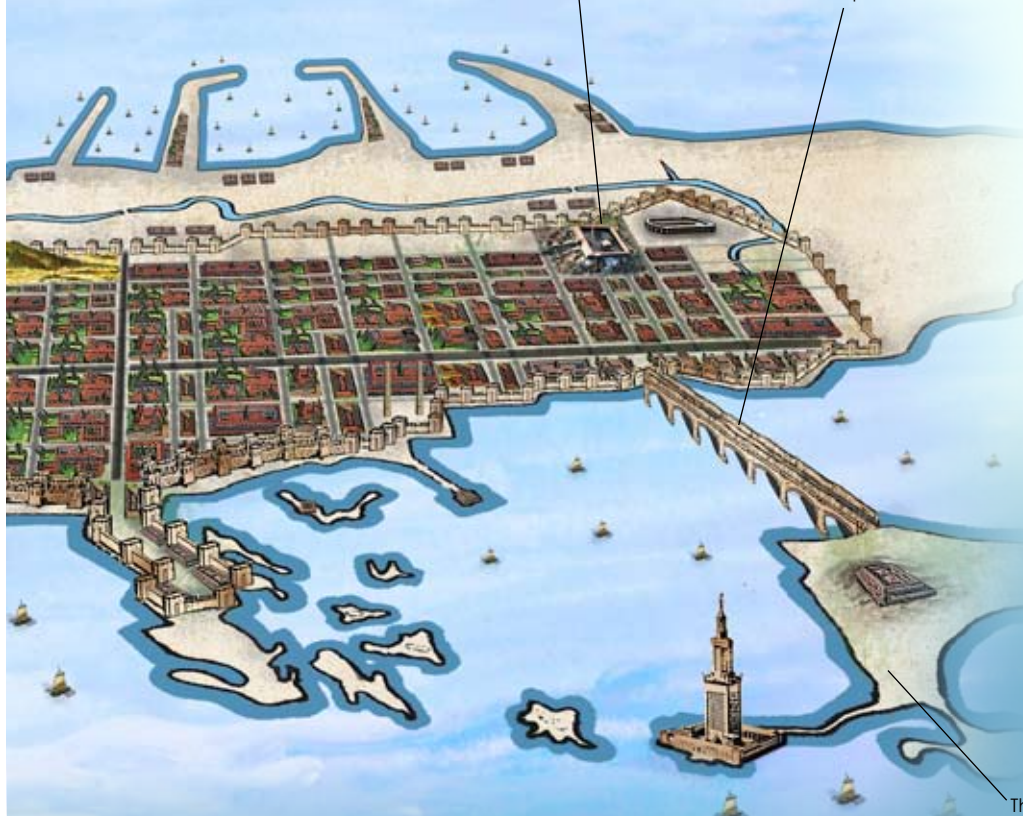
The narrow strip of land between the Mediterranean Sea to the north and Lake Mareotis to the south was an excellent site for a city. Alexandria had access to the Mediterranean countries through its two sea harbors as well as access to the rest of Egypt via the inland harbor on Lake Mariout. All the trade and goods transported by ship from across sea and by boat on the lake and the River Nile, would pass through Alexandria making it a very wealthy city.

A GOOD OMEN

Alexander, like many people of that time, believed in dreams and was superstitious. Legend says that whilst his surveyors – the people who created the plan for the city – were drawing out the plan on the ground, they ran out of chalk and so they used grain instead. Suddenly a flock of birds flew down and ate up the grain. Alarmed by this, Alexander consulted his soothsayers who reassured him that this was a good omen meaning that Alexandria would become a wealthy city to which people would flock from everywhere.

The Serapeum

The Heptastadium



The Island of Pharos

DEINOCRATES OF RHODES

One of the best architects of that time was asked to build Alexander's new city: a Greek named Deinocrates of Rhodes. Alexandria had five quarters named after the first five letters of the Greek alphabet: Alpha, Beta, Gamma, Delta and Epsilon. The streets lay in a crisscross pattern. There were two long, very wide avenues lined with marble columns. One stretched from north to south, whilst the other, called the Canopic Way, crossed Alexandria from east to west. At the east end of it was the Gate of the Sun, and to the west, the Gate of the Moon. Deinocrates designed a separate royal quarter called the Brucheion, which was reserved for the royal palaces.

THE PTOLEMIES

THE FOUNDATION OF A DYNASTY

When Alexander the Great died in 323 BCE, his vast empire was divided between four of his army generals. It was General Ptolemy who became the king of Egypt and founded the Ptolemaic Dynasty. He and his descendants, the Ptolemies, became the ruling royal family of Egypt for the next three hundred years.



KING PTOLEMY I SOTER

King Ptolemy I tried to make the Egyptians accept him as their king by adopting Egyptian customs. For example he and his descendants behaved as though they were demigods (half-gods), just as the Egyptian Pharaohs had done. They too were deified, that is to say, officially considered as gods. Ptolemy I was given the title Ptolemy I Soter (the Savior).

Ptolemy I was an educated man who wanted to make Egypt's new capital city, Alexandria, a center of learning where the greatest thinkers would come. To achieve this he built the Mouseion which soon became the most important place of learning with its magnificent library, the Library of Alexandria.

He also built a great lighthouse, which was so extraordinary that it was considered one of the Seven Wonders of the Ancient World. It guided ships through the treacherous waters off the coast of Alexandria, helping sailors to the safety of the harbor away from the rocks.

A statue of a Ptolemaic king

PTOLEMAIC FAMILY TREE



KING PTOLEMY II PHILADELPHUS

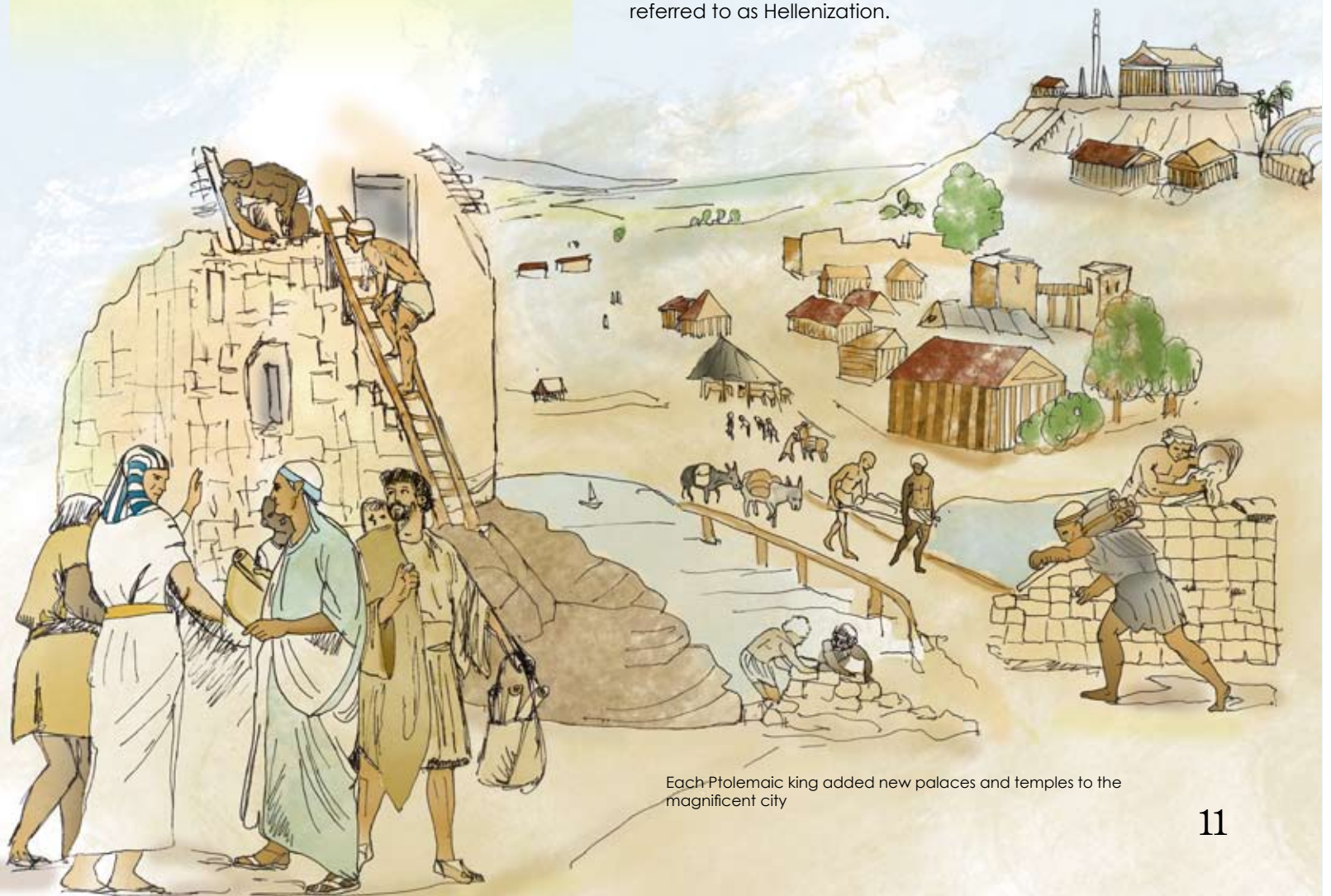
Ptolemy I's successor was his son, Ptolemy II. Also an educated man, he continued in his father's footsteps. Ptolemy II attracted the greatest minds of the day — poets, scientists, mathematicians, astronomers, philosophers — to come to live in Alexandria and work in its wondrous library. Thus people of many different nationalities lived in Alexandria.

Ptolemy II married his sister Arsinoe and so became known as Ptolemy II Philadelphus (which means "the sister-loving"). Queen Arsinoe was a very cultured woman who is believed to have encouraged her husband (half-brother) to collect scrolls and manuscripts for the great library.

Each Ptolemaic king added beautiful new public buildings and palaces to the city. The historian Strabo, who visited Alexandria during the first decade of Roman rule, wrote that *"just as each of the kings would for love of splendor add some ornament to the public monuments, so he would provide himself at his own expense with a residence in addition to those already standing..."*

HELLENISTIC ALEXANDRIA

The period of Greek civilization which followed the death of Alexander the Great in 323 BCE became known as the Hellenistic period. There had already been Greeks living in Egypt before the arrival of Alexander, but these were mostly merchants and traders living around the ancient port of Naukratis. Under the Ptolemies however, more and more Greeks came to settle in the country. Alexandria became a leading center of Hellenistic culture. Gradually, certain aspects of Egyptian culture became more Greek, a process referred to as Hellenization.



Each Ptolemaic king added new palaces and temples to the magnificent city

QUEEN CLEOPATRA VII

The most famous of the Ptolemies, however, was not a king but a queen. Queen Cleopatra VII was the last reigning monarch of the Ptolemaic dynasty. It was during her reign that the Romans invaded Alexandria and that Egypt became part of the Roman Empire.

JULIUS CAESAR

In 48 BCE, when the Roman general, Julius Caesar, landed in Alexandria, Cleopatra was 21 years old. She had ruled Egypt for three years with her younger brother Ptolemy XIII until he ousted her from the throne. The exiled queen saw Julius Caesar's arrival as her chance to get back on the throne of Egypt if only she could persuade this powerful Roman general to help her. She got herself smuggled into the palace in a rolled up carpet. The carpet was brought before Caesar as a gift and as it was rolled out, Cleopatra suddenly appeared before him! She charmed him and succeeded in persuading him to put her back onto the throne of Egypt. However peace did not last for long because Cleopatra's brother, young Ptolemy XIII, soon ordered the Egyptian army to attack.

The Ptolemaic queens of Alexandria were often represented as the goddess Isis. Here Queen Cleopatra is dressed with the crown of Isis and holding a sistrum, a sacred musical instrument used in religious ceremonies in ancient Egypt.



A CLEVER QUEEN

Like her ancestors, Cleopatra was highly educated. She spoke several languages including Egyptian which made her popular with the Egyptians. She bore Julius Caesar a son, Caesarion, meaning "Little Caesar", who became Ptolemy XV and co-ruler of Egypt with his mother. Cleopatra traveled with Caesarion to Rome in 46 BCE, however, when Julius Caesar was assassinated there in 44 BCE, she returned to Alexandria.



Julius Caesar



THE GREAT FIRE

When Ptolemy XIII's army attacked the palace, the fighting spread throughout the royal quarter of Alexandria. It soon reached the ships in the harbor. As Julius Caesar's ships were greatly outnumbered by Ptolemy's, he decided that the only way to win the battle was to set fire to the Egyptian ships. This clever move meant that Caesar did win, however the fire soon spread to the mainland burning much of the royal quarter including part of the great Library of Alexandria.

MARK ANTONY

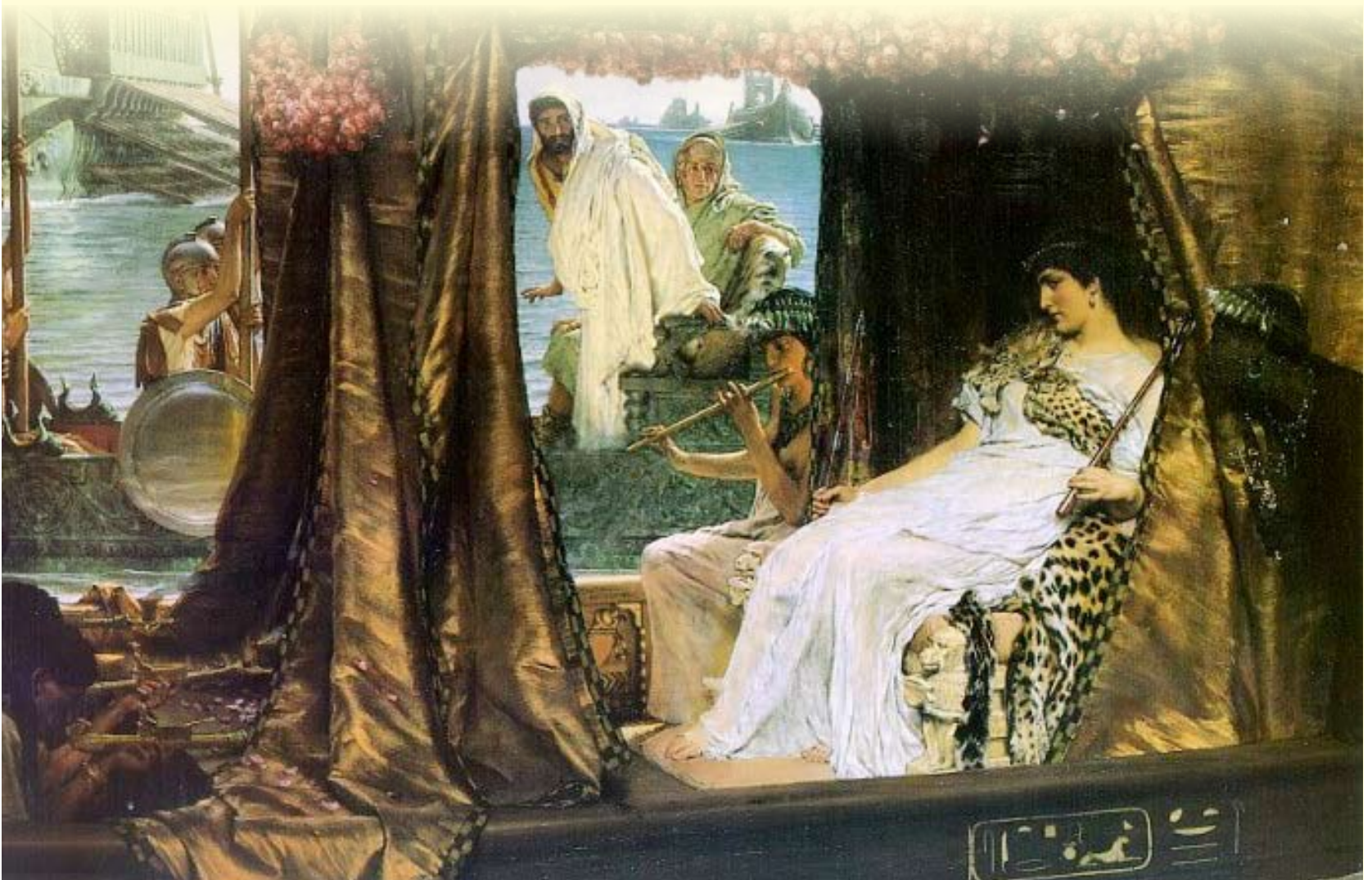
In 41 BCE, Mark Antony, one of the three ruling men of Rome known as triumvirs, traveled to the city of Tarsus (which is located today in southern Turkey) where he sent summons to Cleopatra to come to meet him. He wanted to test her loyalty to the Roman Empire.



The Greek historian Plutarch wrote about Marc Antony describing his first encounter with Queen Cleopatra near Tarsus, on the River Cyndus. According to Plutarch, Cleopatra at first ignored Antony's summons, then finally she sailed up the River Cyndus in a boat with a gilded stern, purple sails and silver oars, accompanied by music played on flutes and harps. The queen lay under a canopy of golden cloth, dressed as the goddess Venus. Young boys, painted to look like the god Cupid, fanned the queen, while her maids were dressed as sea nymphs. Upon her arrival, Antony invited her to supper, but she insisted that it was he who should come to dine with her. As the queen had planned, Antony was dazzled by the extraordinary banquet she had prepared for him. Eventually, he accompanied her back to Alexandria. Later, they married and she bore him three children.

Many artists and writers have been inspired by Plutarch's historical account of Antony and Cleopatra. One of them was William Shakespeare, who in 1623 wrote a play entitled *Antony and Cleopatra*. In 1885, the artist Lawrence Alma-Tadema created this painting representing Cleopatra's arrival on her golden boat, dressed as Venus, with Antony gazing at her in amazement.

Original painting by Lawrence Alma-Tadema



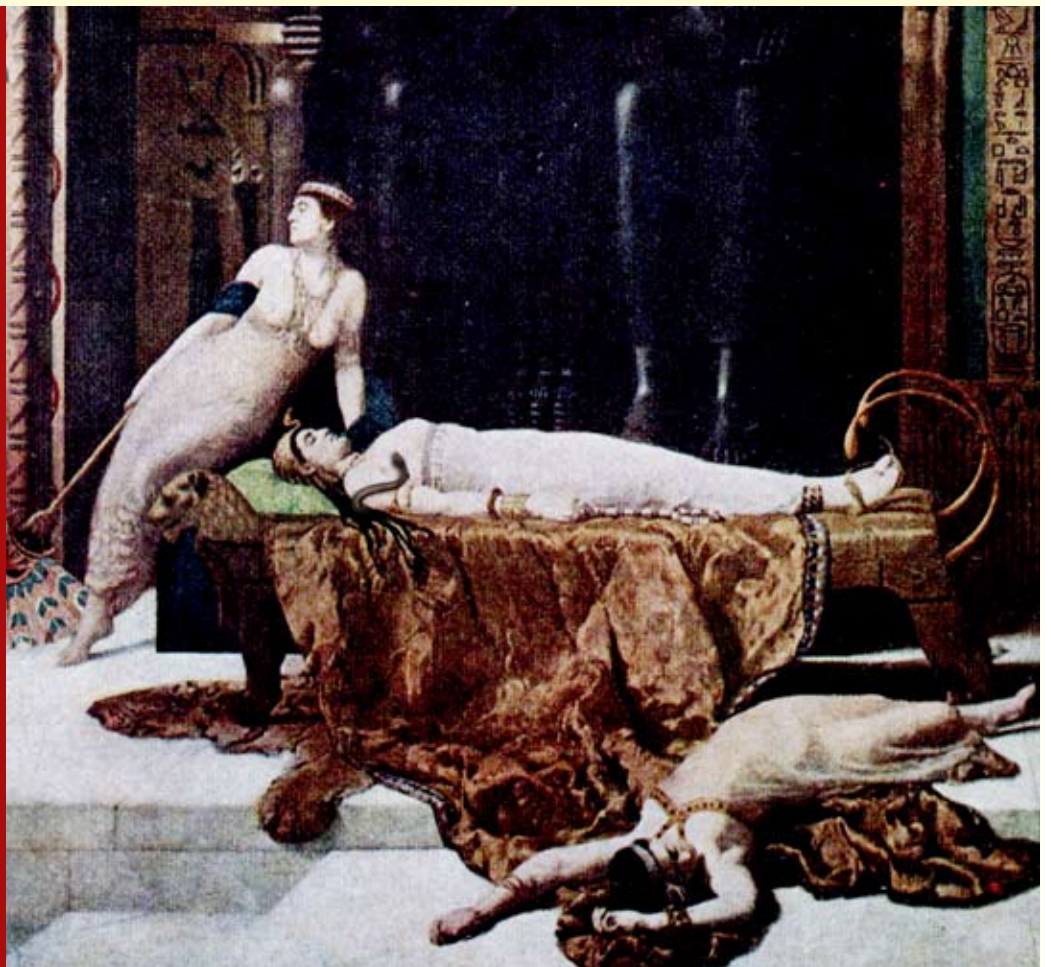


THE BATTLE OF ACTIUM

In 31 BCE Anthony and Cleopatra were defeated in a great sea battle, the Battle of Actium, by Octavian, who later became the Roman Emperor Augustus. The vanquished couple fled back to Egypt. The following year, Octavian caught up with Antony, whose own men abandoned him. Faced with total defeat, Antony took his own life.

CLEOPATRA'S SUICIDE

A few days after Antony's suicide, Queen Cleopatra, rather than become a Roman prisoner, also took her own life. It is believed that she was bitten by a kind of venomous Egyptian snake called an asp. Her young son, Caesarion, disappeared and it is thought that he was assassinated. Thus, the Ptolemaic dynasty came to an end, and Egypt came under Roman rule.

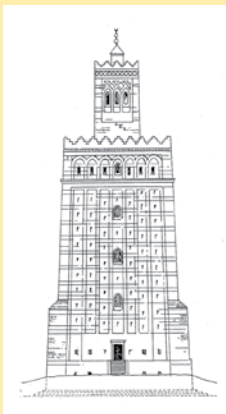


Original painting by John Collier

THE PHAROS OF ALEXANDRIA

One of the Seven Wonders of the Ancient World

The first two Ptolemaic kings erected many splendid buildings in Alexandria. The most famous of these was a magnificent lighthouse built on the Island of Pharos, after which it was named. This lighthouse was so impressive that it was one of the Seven Wonders of the Ancient World. King Ptolemy I chose one of the best architects of the day, Sostratos of Cnidos, to build the Pharos. It took about twelve years to build and was completed under the reign of Ptolemy II. Its bright light guided ships safely through the rocky waters and into the great harbor of Alexandria.



In the 1117, the Arab traveler, Abu Hamid Al-Andalusi, observed that a mosque had been built on top of the damaged lighthouse.

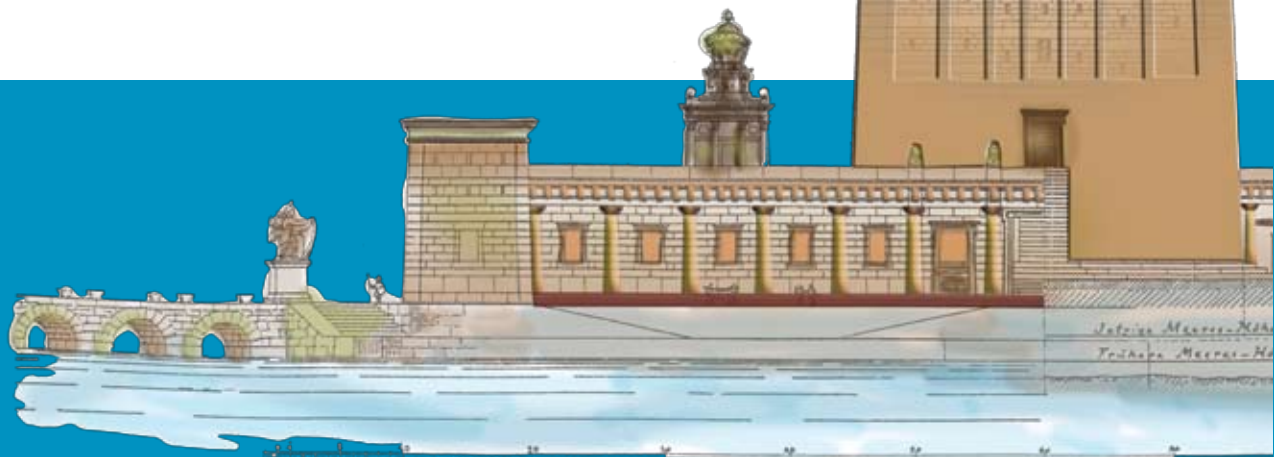
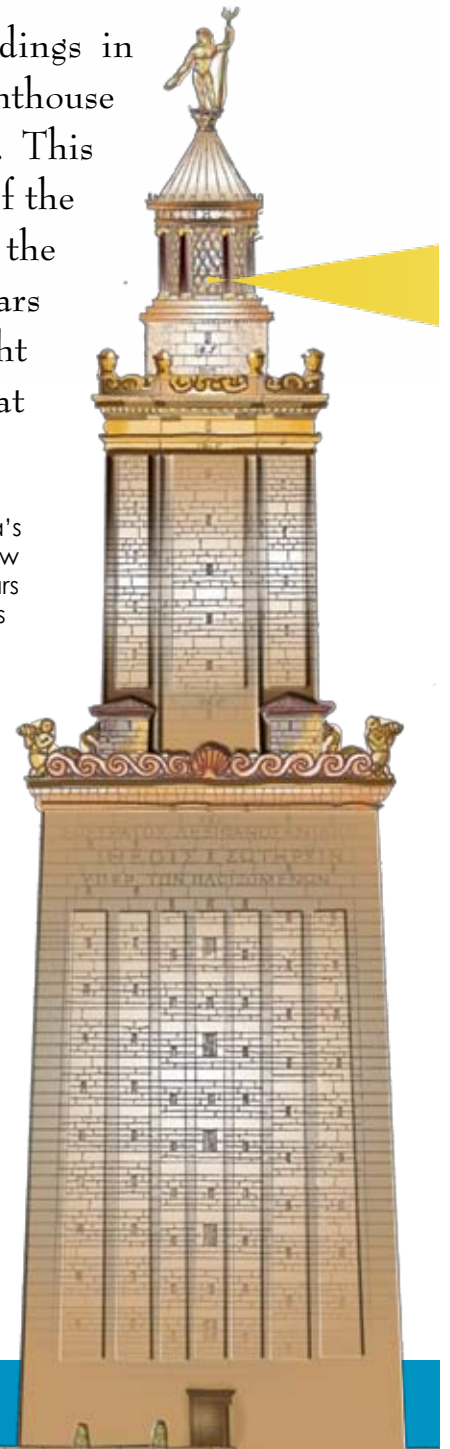
A GREAT MONUMENT

Nothing remains standing of Alexandria's ancient lighthouse today. However we know what it looked like because the Pharos appears on ancient coins, mosaics and other objects which were made in its image. In addition to these artifacts, there are descriptions of it by travelers who actually saw it long ago. A small replica, or copy, of the lighthouse is still standing today near the ancient city of Taposiris Magna to the west of Alexandria.

The Pharos had three levels. The lower level was square with slightly sloping walls. The middle section was octagonal in shape. The third storey was a round tower with a dome-shaped roof. Right at the top was a statue, probably of Poseidon, the Greek god of the sea. The whole lighthouse measured about 120 meters high, which was very tall for that time.

The lighthouse stood in a courtyard with two giant statues of gods. A ramp led up to its entrance, with a spiral staircase inside leading up to the top. Its façade

was decorated with tritons: men with fish tails carrying tridents and shell trumpets.



ISIS-PHARIA

The Pharos of Alexandria had its own protective goddess, Isis-Pharia, who was an incarnation of the ancient Egyptian goddess: Isis. She was believed to protect ships and sailors.

The worship of Isis-Pharia soon spread to elsewhere in the ancient world and images of her can be found on sculptures, paintings and coins. For example it is thought that she looked something like the Statue of Liberty in the city of New York, because its sculptor, a Frenchman named Bartholdi, was inspired by the images of Isis-Pharia which he saw when he visited Egypt.



This ancient coin shows Isis-Pharia sailing towards the Pharos

OPTICS AND MIRRORS

We do not know exactly how the Pharos' beacon light worked. Some people believe that at night the light was created by a great fire, whilst, during the day time mirrors were used to reflect the sun's rays. Mirrors were sometimes used to create strong light. The ancient Egyptians had used them to reflect the sun's light into dark underground tombs. Moreover, the Greek scientist Archimedes, who spent several years in Alexandria, also developed a way of reflecting the sun's rays to set fire to enemy ships.

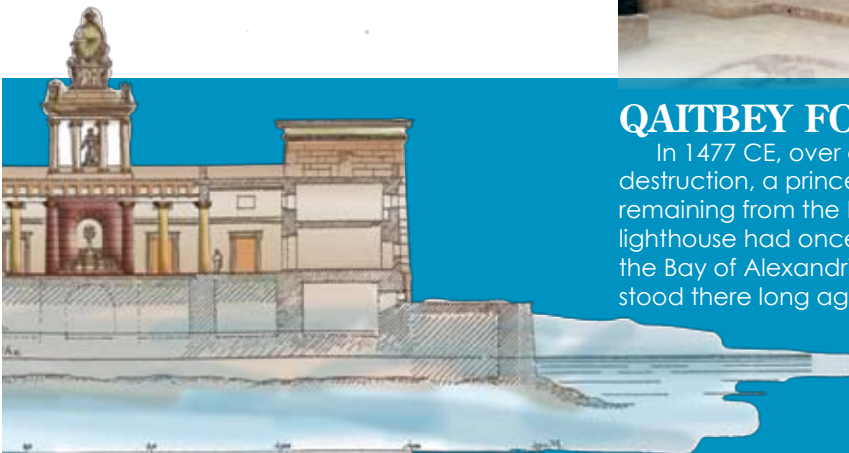
THE DESTRUCTION OF THE PHAROS

The main threat to the great lighthouse was from the frequent earthquakes which shook the Mediterranean region. Between 320 CE and 1303 CE, twenty-two earthquakes were recorded. Some of the stronger ones destroyed parts of the lighthouse. Finally, in 1303 a very violent earthquake made what was left standing of the Pharos fall into the sea in the Bay of Alexandria. Today, archeologists exploring under water in the Bay of Alexandria have discovered huge blocks of masonry, some of which are believed to have belonged to the Pharos.



QAITBEY FORT

In 1477 CE, over a hundred and seventy years after the Pharos' destruction, a prince, the Sultan Qaitbey, used the foundation stones remaining from the Pharos to build a huge fort in the place where the lighthouse had once stood. Today, Qaitbey Fort can still be seen overlooking the Bay of Alexandria, as a reminder of the magnificent lighthouse which stood there long ago.



THE LEGACY OF THE PHAROS

Although lighthouses already existed in ancient times, the Pharos was so extraordinary that it inspired many other buildings to be built in a similar style. Even long after it had disappeared, other lighthouses were built on its model, as well as different kinds of buildings such as towers and minarets. Moreover, “pharos” became the origin of the word for “lighthouse” in several European Languages such as the French word “phare”.

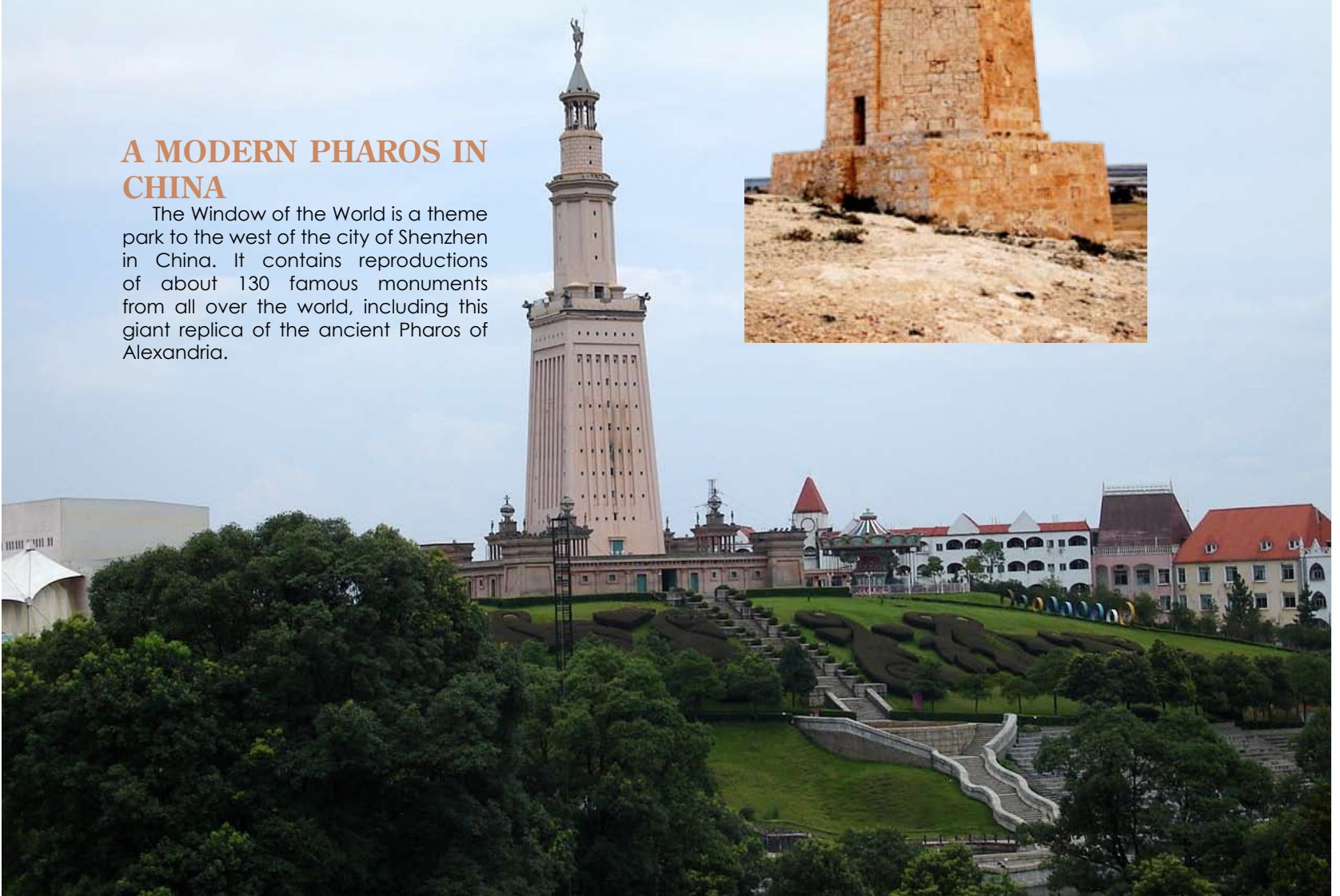
TAPOSIRIS MAGNA

This tower, which was probably a watch tower, was built about 45 kilometers to the west of Alexandria near the temple of Taposiris Magna. Built in Greco-Roman times and known today as “Borg el Arab” it is a small replica of the Pharos.



A MODERN PHAROS IN CHINA

The Window of the World is a theme park to the west of the city of Shenzhen in China. It contains reproductions of about 130 famous monuments from all over the world, including this giant replica of the ancient Pharos of Alexandria.



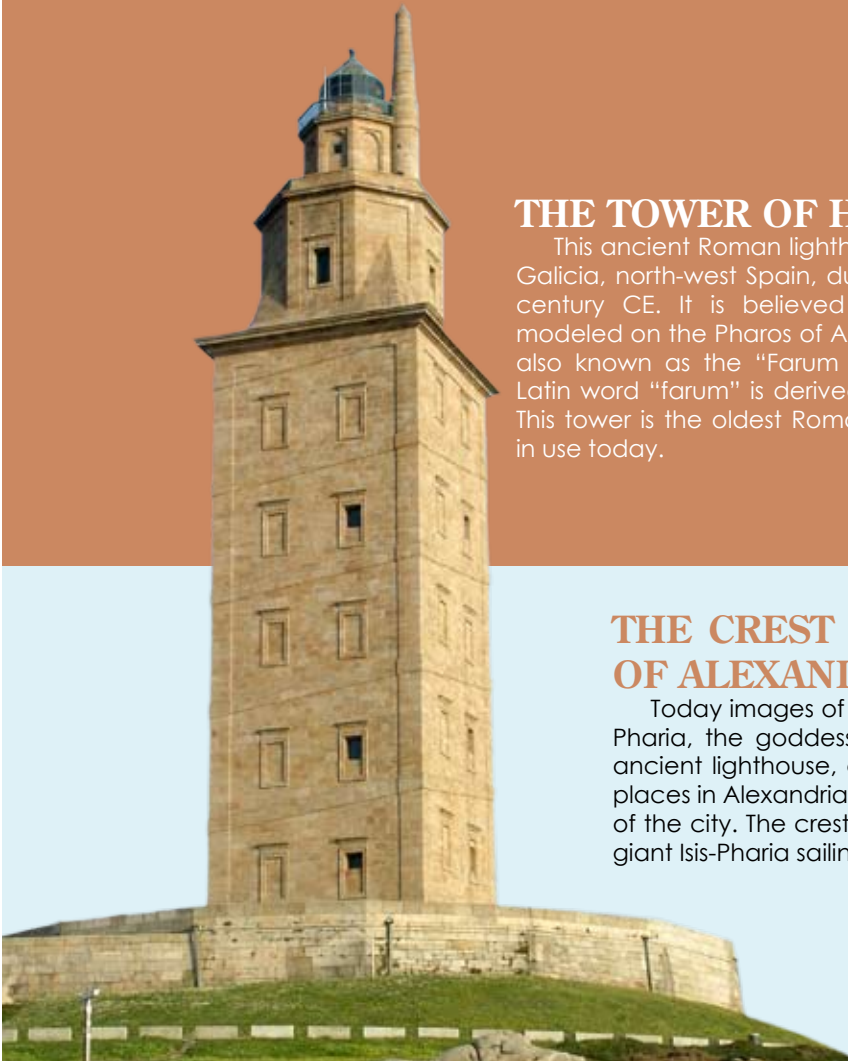
THE TOUR MAGNE

The Tour Magne, or "Great Tower", is a Roman tower which was built in the French town of Nîmes, during the reign of the Emperor Augustus. Like the ancient Pharos of Alexandria, it has three levels. It is also octagonal-shaped, like the Pharos' second level. It is likely that both Augustus and the Roman soldiers who built this defence tower, would have seen the Pharos earlier, when they were stationed in Alexandria.



THE TOWER OF HERCULES

This ancient Roman lighthouse was built in Galicia, north-west Spain, during the second century CE. It is believed to have been modeled on the Pharos of Alexandria. It was also known as the "Farum Brigantium": the Latin word "farum" is derived from "pharos". This tower is the oldest Roman lighthouse still in use today.



THE CREST OF THE CITY OF ALEXANDRIA

Today images of the Pharos and of Isis-Pharia, the goddess associated with the ancient lighthouse, can be seen in many places in Alexandria including on the crest of the city. The crest shows an image of a giant Isis-Pharia sailing towards the Pharos.



THE LIBRARY AND MOUSEION OF ALEXANDRIA



THE BUILDING OF A GREAT LIBRARY

In 304 BCE, Ptolemy I invited the Greek poet and philosopher, Demetrius of Phalerum, to Alexandria. He became the king's personal advisor and suggested to the king to create a great center of learning. To achieve this, a magnificent library was built in the royal quarter.

So that the library should possess all the important books of the day, the works of playwrights, poets, mathematicians, scientists and philosophers were bought, or sometimes 'borrowed' from other libraries and never returned. Even ships docking in the port of Alexandria were searched for manuscripts which could be copied for the great library. Sometimes the originals would be kept and only the copies were returned to the ships!

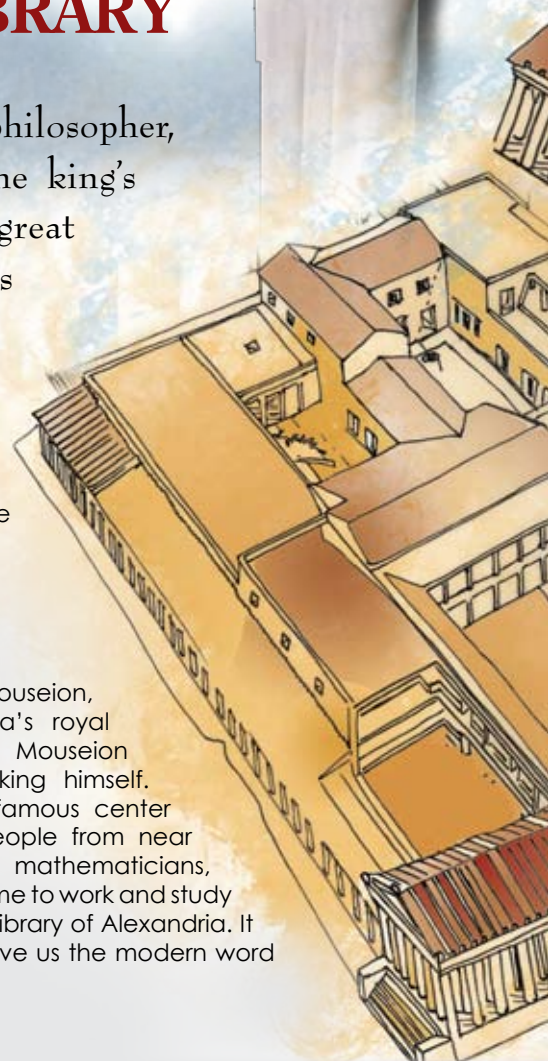


THE MOUSEION

A temple to the Muses, or Mouseion, was also built in Alexandria's royal quarter. The priest of the Mouseion was appointed by the king himself. This temple became a famous center of learning attracting people from near and far. Many scientists, mathematicians, astronomers and poets came to work and study in the Mouseion and the Library of Alexandria. It is the Mouseion which gave us the modern word "museum".

THE LIBRARY CATALOGUE

Nowadays, people quickly search for books in a modern library using computers. But how was this done in the ancient Library of Alexandria? One person who played an important role here was Callimachus, the court poet to King Ptolemy II. Callimachus catalogued the library's collection of scrolls — some people claim there were as many as 500,000! He created a series of 120 books listing these works in chronological order.

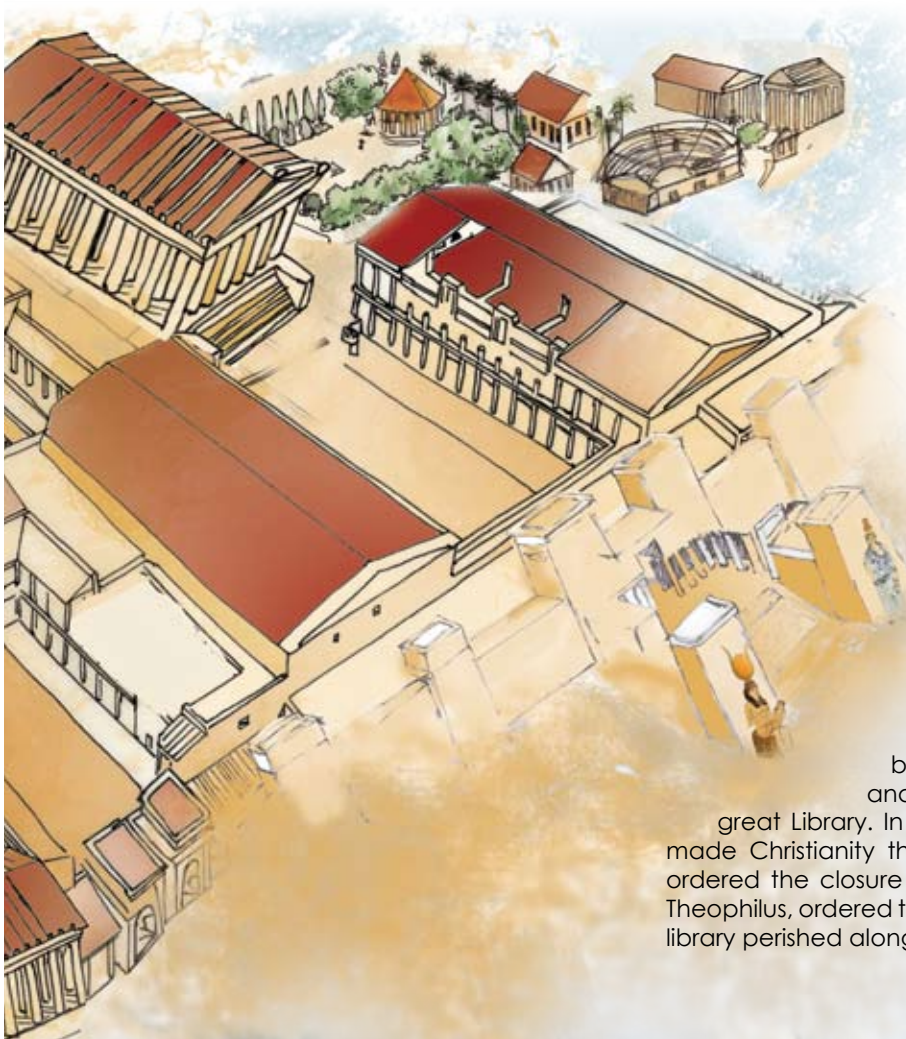




The remains of the ancient Library of Celsius in modern Turkey. This shows what the ancient Library of Alexandria might have looked like.

ROYAL FAVOR

Although the scientists and poets at the library enjoyed many advantages, they were nevertheless subject to the king's favor. Anyone who forgot that could pay a heavy price. One such man was Sotades of Maroneia who made the dangerous mistake of criticizing King Ptolemy II for marrying his own sister, Arsinoe II. As a result Sotades was put in prison.



An artist's impression of the ancient Library of Alexandria

THE FATE OF THE LIBRARY AND MOUSEION

Today, nothing remains of the great Library or the Mouseion. Different accounts of their destruction exist. According to the Greek historian Plutarch, in 48 BCE when Julius Caesar set fire to his own ships in the Bay of Alexandria, the fire spread burning the docks and then the Library also. Other accounts say that only part of the books were destroyed.

THE DAUGHTER LIBRARY

Many temples at that time had their own library. After the great Library of Alexandria was partly destroyed, the library of the Serapeum became more important. It attracted many scholars and was considered the "daughter" (or "sister") of the great Library. In 391 CE however, the Roman Emperor Theodosius I made Christianity the official state religion of the Roman Empire and ordered the closure of all pagan temples. The Patriarch of Alexandria, Theophilus, ordered the destruction of the Serapeum, and so the daughter library perished along with the temple.

THE REBIRTH OF THE ANCIENT LIBRARY

Over the centuries, Alexandria's ancient library became legendary. As the legend never died, it was at last decided to create a new modern Library of Alexandria. So, in 2002, a new library named the Bibliotheca Alexandrina was inaugurated, which, like its ancient ancestor, attracts scientists and scholars from all over the world.



SCIENCE

The first three Ptolemaic kings were highly educated men who encouraged the study of sciences and literature at the great Library of Alexandria. Many people who came to work at the library did not limit themselves to one field of knowledge. They could be scientists, as well as mathematicians, astronomers and geographers.



EUCLID

One of the most important mathematicians of the ancient world, and whose ideas are still taught in classrooms today, was Euclid. Despite his Greek name it is thought that Euclid was born in Egypt, near Alexandria. Euclid is famous for his thirteen books of mathematics called *Elements* and for his theories of geometry.



It is said that Euclid only allowed his students to use a ruler and a compass in geometry. According to tradition, one day when he was giving a geometry lesson to some of his students, one of them made the mistake of asking, "What use is that, Sir?" To which the impatient teacher replied, "Give him a coin, since he wants to earn money with his learning!"

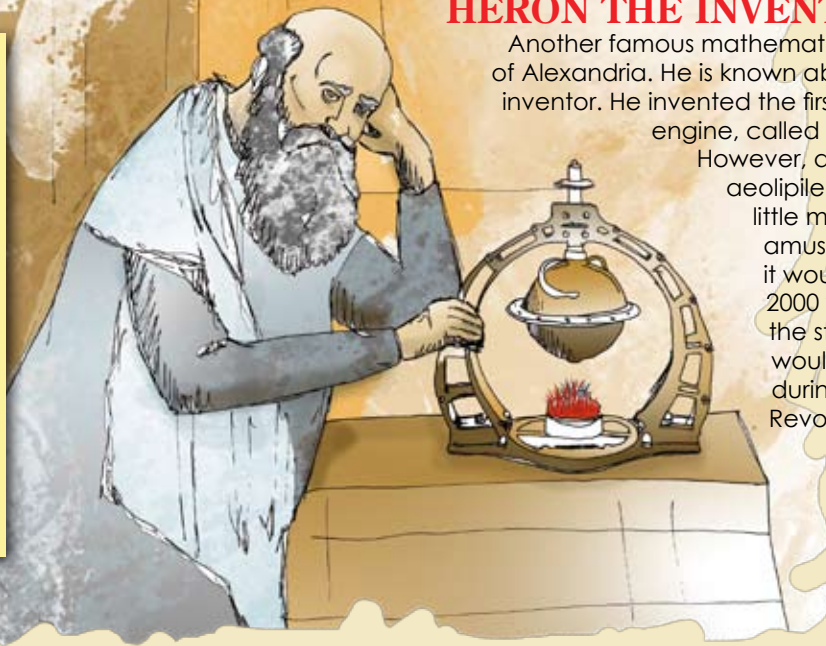
ARCHIMEDES

Perhaps the most famous scientist who came to study in Alexandria was a Greek called Archimedes. One of his many inventions, called Archimedes' screw, was probably invented while he was in Alexandria and is still used today. This mechanism lifts liquids such as water from a lower level to a higher level. It is especially used by farmers to irrigate their crops.

Archimedes is said to have used lenses or mirrors to reflect the sun's rays and set fire to ships.



This is an ancient Egyptian water clock or "clepsydra". Water dripped out of it slowly through a small hole in the bottom. The markings on its side, show the level of the water left and indicate the time of day. This simple type of clock would have still been in use in ancient Alexandria.



HERON THE INVENTOR

Another famous mathematician was Heron of Alexandria. He is known above all as an inventor. He invented the first ever steam engine, called an aeolipile.

However, at that time, the aeolipile was considered little more than an amusing distraction and it would be another 2000 years before the steam engine would be put to use during the Industrial Revolution in Europe.

ALEXANDRIAN MEDICINE

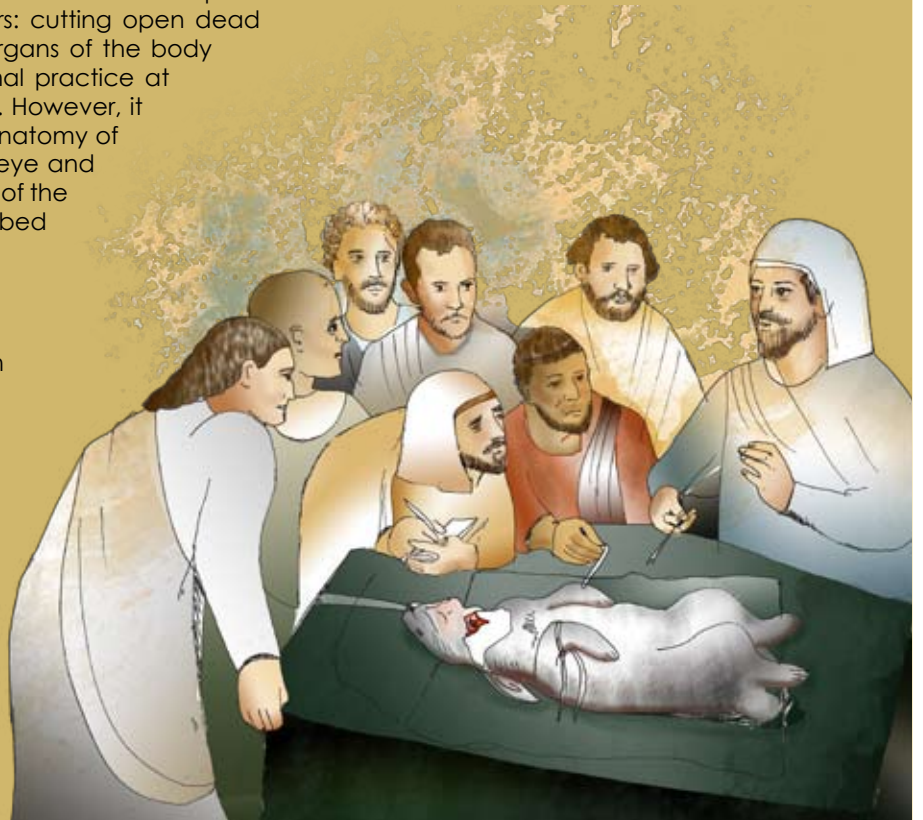
Medicine was another science studied in Alexandria. Many important medical discoveries were made there by doctors who studied anatomy: the structure of the human body. They also learnt many new facts about physiology: the way the body works.

HEROPHILUS

One famous doctor who came to work in Alexandria was Herophilus of Chalcedon. He was known for dissecting cadavers: cutting open dead bodies to examine the structure of the different organs of the body and how they worked. Dissection was not a normal practice at that time and so some people criticized Herophilus. However, it enabled him to make new discoveries about the anatomy of parts of the human body, including the brain, the eye and the nervous system. He invented names for the parts of the body which he discovered using words which described what they looked like to him.

GALEN

Claudius Galen came from the city of Pergamon but spent about twelve years living and working in Alexandria. Galen is famous for having begun experimentation in medicine. He would dissect animals such as dogs and apes, as well as human beings, to discover how the body worked. He also performed operations such as brain and eye surgery. His discoveries in anatomy were to have a lasting influence. Throughout the Middle Ages, students of medicine would study Galen's books on anatomy.

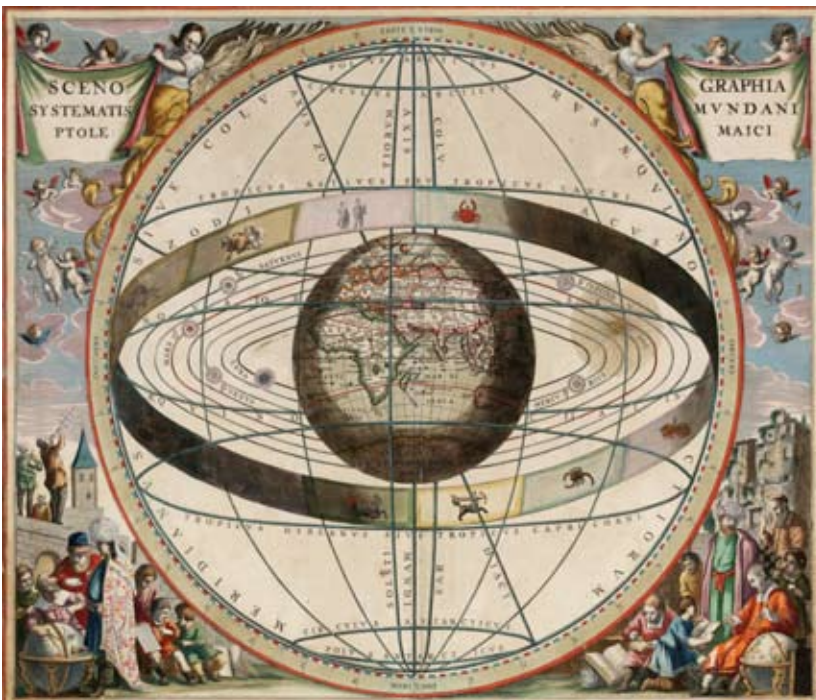


ASTRONOMY

The ancient Egyptians had been keen astronomers. Then, the Greeks who settled in Alexandria also made the study of the stars and planets one of the most important sciences in the city. Some of their discoveries are still with us today.

ERATOSTHENES

One of the most famous scientists of the time, who was an astronomer, a mathematician, an inventor and even a poet, was Eratosthenes. Today he is known above all for being the first man to calculate the Earth's circumference. He did this by measuring the angle of the sun's rays at midday in two different towns in Egypt, Alexandria and Syene (present day Aswan). As he also knew the distance between the two towns, he used his knowledge of geometry to calculate the distance all the way round the Earth.



ARISTARCHUS OF SAMOS AND CLAUDIUS PTOLEMY

The astronomer Aristarchus of Samos was the first to develop a heliocentric theory of the universe, that is a theory according to which the sun is at the center of the universe and the planets travel around it. This idea was generally dismissed however.

Instead, people followed the ideas of another Alexandrian astronomer, Claudius Ptolemy, who believed that the Earth was at the center of the universe. It was not until about 1700 years later that a heliocentric theory was once again put forward, this time by the Polish astronomer Copernicus, and it was at last believed by people.

This chart, based on Claude Ptolemy's solar system, shows the Earth at the center of the universe. It was published in Amsterdam in 1660.

PHILOSOPHY

HYPATIA

Hypatia of Alexandria was a mathematician, astronomer and philosopher. She was taught by her father, Theon, who was a prominent mathematician and the last recorded member of the Mouseion of Alexandria. Hypatia was the author of books on geometry, algebra and astronomy, and became a famous teacher much admired by her pupils.

As a highly respected teacher and philosopher, she was often consulted by the Roman prefect of Alexandria, Orestes. However, her influence over the Roman prefect was resented. She became the object of rumor, accused of magic and witchcraft, until one day a mob attacked her and dragged her through the streets of Alexandria. Hypatia was brutally murdered, her body torn to pieces.

THE JULIAN CALENDAR

The calendar used in Alexandria dated back to ancient Pharaonic times. It was a solar calendar based on the time it takes for the Earth to travel once round the sun, or 365 and $\frac{1}{4}$ days. In practice however, this calendar was divided into 12 months of 30 days each and a thirteenth month of 5 days only. But this meant that there were six hours (or a quarter of a day) missing each year. In 237 BCE, Egyptian priests suggested to reform the calendar to King Ptolemy III, but the reform did not take place.

Nearly two hundred years later, an astronomer named Sosigenes who met Julius Caesar in Alexandria, solved the problem by reforming the existing calendar. His new calendar was also based on the solar year of 365 days, but he added an extra day every four years to make up for the six missing hours each year. This new calendar was named the Julian Calendar, after Julius Caesar.

KEY DATES

- c.335–280 BCE **Herophilus of Chalcedon** made many discoveries about human anatomy.
- c.310–230 BCE **Aristarchos of Samos** was the first astronomer to discover that the sun is at the center of the universe and that the planets travel around it.
- c.310–230 BCE **Eratosthenes** was the first person to calculate the Earth's circumference.
- 3rd century BCE **Euclid** made discoveries in mathematics and geometry which are still taught today.
- c.287–212 BCE **Archimedes** created many inventions including Archimedes' screw still used today.
- 1st century BCE The **Julian Calendar** was invented by the astronomer **Sosigenes**.
- c.10–70 CE **Heron of Alexandria** created many inventions including the first steam engine known as the aeolipile.
- c.90–c.168 CE **Claudius Ptolemy's** work, the *Almagest*, was considered the most important book on astronomy throughout the Middle Ages.
- c.131–c.201 CE **Claudius Galen** carried out medical experiments and made many discoveries in human anatomy.
- c.350–415 CE The philosopher and scientist **Hypatia** was famous for her great learning.

POETRY, HISTORY AND PHILOSOPHY



The remains of a classroom today in Alexandria's ancient School of Philosophy.

In addition to the sciences, many other subjects were studied in ancient Alexandria. These included poetry, philosophy and history. The Ptolemies were great admirers of the ancient Greek poet Homer especially, who lived in about 800 BCE. These kings encouraged poets in Alexandria to study Homer as well as to write their own poetry.

THE LOCK OF BERENICE

The court poet Callimachus' most famous poem was about a lock of hair! The wife of King Ptolemy III, Queen Berenice, offered a lock of her hair to the goddess Aphrodite so that her husband would return safe and victorious from war. However, the lock was stolen from the temple where she had placed it. To explain this disappearance and avoid public scandal the court astrologer, Conon of Samos, said that the hair had been taken by the god Zeus and made into a group of stars, or constellation, up in the sky. This constellation was then named *Coma berenices*: the Lock of Berenice.



MANETHO

The priest and historian Manetho was one of the few native Egyptians who held an important position at the royal court of the Ptolemies: most court positions were held by Greeks at that time. As an Egyptian priest, Manetho had access to the temple libraries and would have been allowed to read secret documents kept in these temples. This helped him to write about Egypt's ancient history. He also wrote a famous list of all the kings of Egypt with the dates of each one's reign. This valuable kings' list is still used today by people who study Egypt's ancient history: Egyptologists.

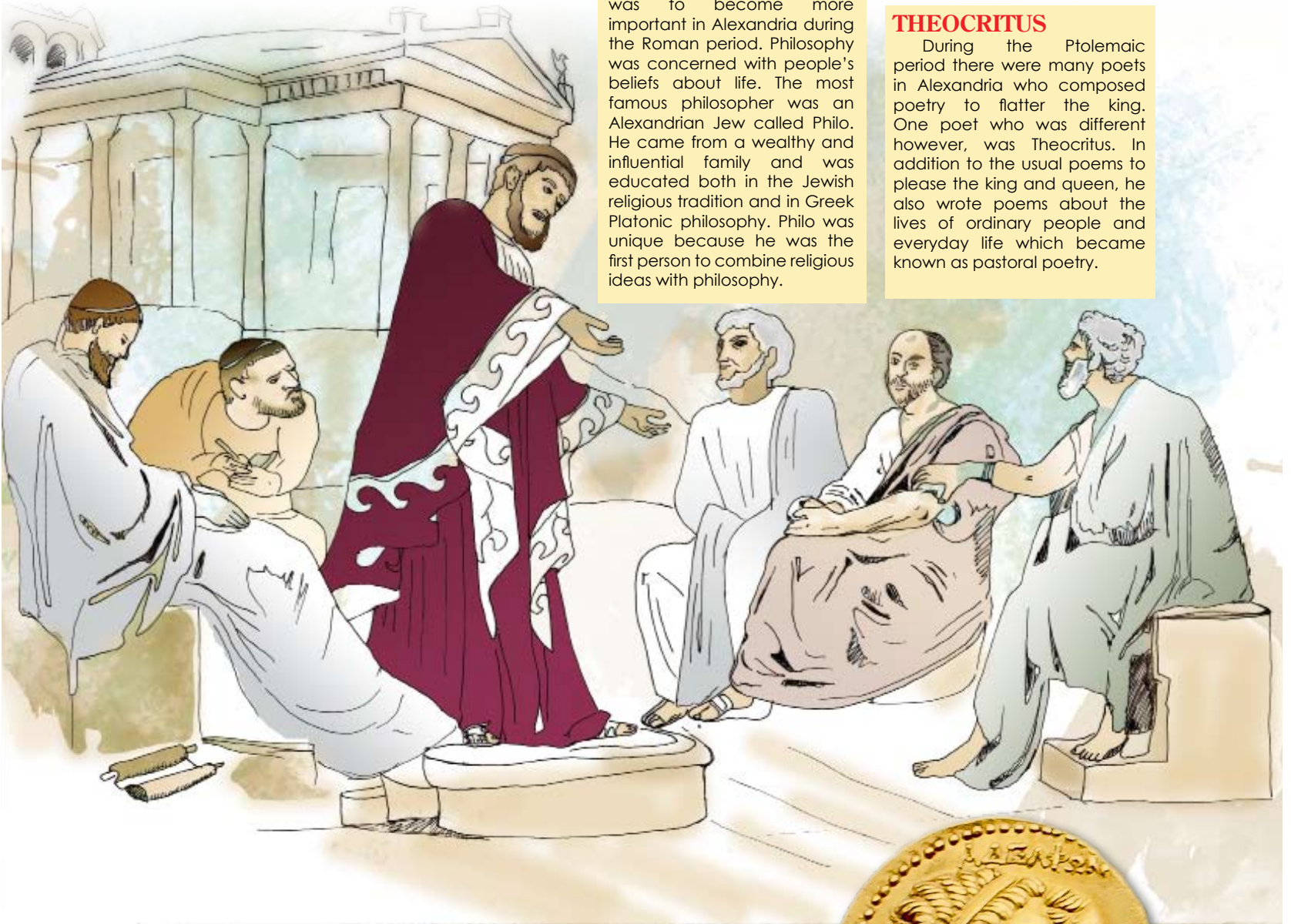


PHILO

The study of philosophy was to become more important in Alexandria during the Roman period. Philosophy was concerned with people's beliefs about life. The most famous philosopher was an Alexandrian Jew called Philo. He came from a wealthy and influential family and was educated both in the Jewish religious tradition and in Greek Platonic philosophy. Philo was unique because he was the first person to combine religious ideas with philosophy.

THEOCRITUS

During the Ptolemaic period there were many poets in Alexandria who composed poetry to flatter the king. One poet who was different however, was Theocritus. In addition to the usual poems to please the king and queen, he also wrote poems about the lives of ordinary people and everyday life which became known as pastoral poetry.



THE COURT POET CALLIMACHUS

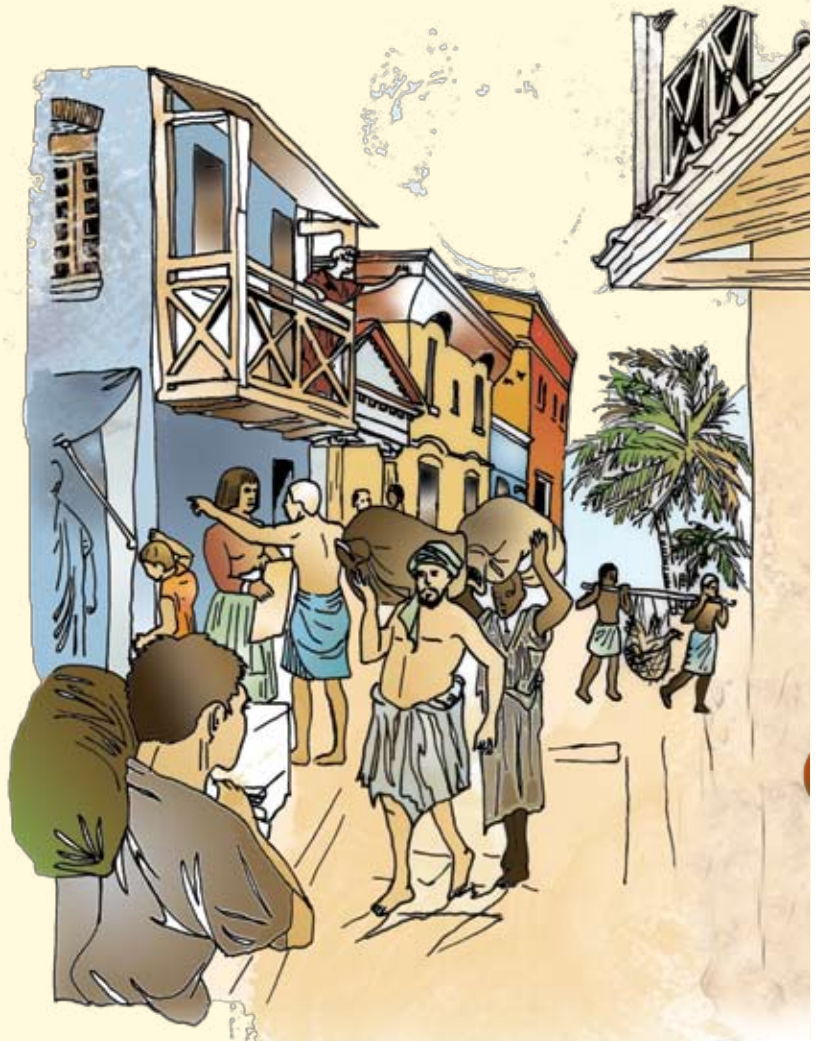
Under the reign of Ptolemy II Philadelphus, a poet who was especially good at writing poems to flatter royalty was Callimachus. He achieved such royal favor, that he was chosen as the official court poet. He wrote a poem especially to praise the king's marriage to his own sister, and years later he wrote another famous poem to mourn the queen's death.

King Ptolemy II Philadelphus
and his sister-wife Arsinoe



DAILY LIFE

As Alexandria became a prosperous city and a great center of learning, people came from many other countries including Libya, Ethiopia, Sicily, Syria, Persia and even faraway India. Nevertheless, the majority of the inhabitants of Alexandria fell into three main groups: the Greeks, the Egyptians and the Jews. The Greeks lived in the east of the city, the Jews mostly in Delta quarter, and the Egyptians in the western quarter, called Rhakotis. However, although Alexandria was an open city which welcomed foreigners, not everyone enjoyed the same rights.



CITIZENSHIP

In all Greek cities of that time, an inhabitant was a "citizen" with full rights if both of his parents were Greek. So in Alexandria, non Greeks such as the native Egyptians were not considered to be "citizens" and did not have the same rights as the Greeks.

Greek citizens enjoyed special rights including taking part in the Greek games, payment of less tax, and cultivating land which was royal property. After Alexandria fell under Roman rule in 30 BCE, the Roman emperors maintained the privileges allowed to the Greek citizens of the city, but also allowed certain people to acquire Alexandrian citizenship.

THE JEWISH POPULATION

According to the Jewish philosopher Philo, there were about 200,000 Jews in Alexandria. Under the rule of the Ptolemies, Alexandrian Jews were free to follow their own religion. However circumstances changed under Roman rule during which there was a series of disturbances between the Greek and the Jewish inhabitants of the city. Finally, the Jewish community of Alexandria was virtually wiped out by Trajan's army during the great Jewish revolt of 115-117 CE when many pagan temples were destroyed. The historian Josephus estimated that about 50,000 Jews were slaughtered during that revolt.



Children's toys

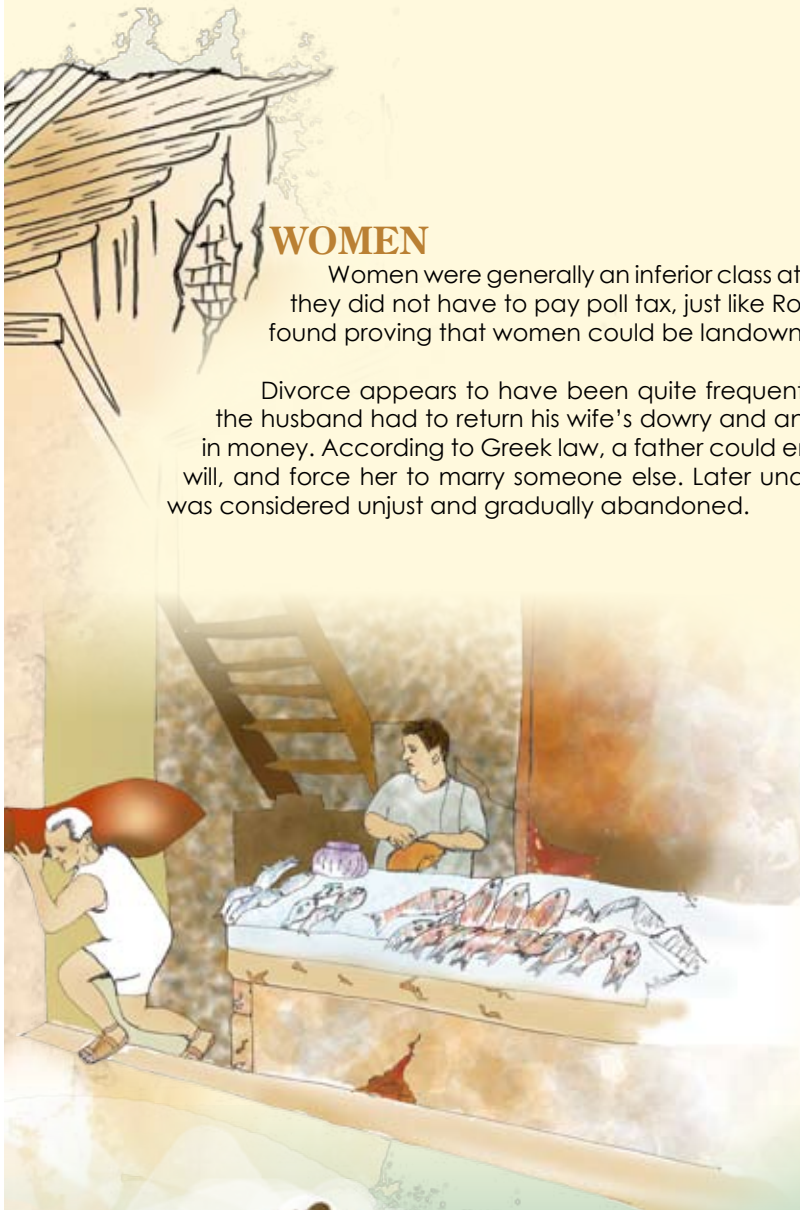
WOMEN

Women were generally an inferior class at that time. During Roman rule however, they did not have to pay poll tax, just like Roman citizens. Papyri have been found proving that women could be landowners and could inherit.

Divorce appears to have been quite frequent and easy. When a couple divorced, the husband had to return his wife's dowry and any gifts she had received or their value in money. According to Greek law, a father could end his daughter's marriage against her will, and force her to marry someone else. Later under Roman rule however, this practice was considered unjust and gradually abandoned.



These statues give us an idea of what women's fashion and hairstyles were like in ancient Alexandria.



SLAVES

Slaves were kept mostly in the towns like Alexandria, rather than in the countryside. During the Ptolemaic period, the number of slaves was controlled by law and the slave trade was highly taxed. Wealthy people with large households would have had many slaves. From the papyri found we know that many of the slaves in Alexandria came from Syria. There were also slaves of other races. For example Negro slaves were brought back by the Ptolemies during their expeditions in the south, and Jewish slaves were acquired in war time.

WATER SUPPLY

One of the most important things needed for any city to prosper is a supply of clean fresh water for the population. When Alexander the Great chose the site for his new city one of the advantages he saw was that fresh water could be brought from the nearest branch of the River Nile a few miles away. Thus a 17 km long canal was dug from the Nile to the east of Alexandria. A complicated network of underground canals, cisterns and aqueducts supplied fresh water throughout the city, including during times of drought or siege.

An ancient cistern



HOMES

Most of the population lived within the city walls of Alexandria at this time, but gradually housing spread to beyond the walls. Richer citizens probably lived in peristyle villas, whilst the poorer people lived in much more crowded buildings. According to the chronicle of a bishop from Antioch, which describes what Alexandria was like in the fourth century, there were 24,296 houses in the city at that time.

A reconstruction of part of a typical Roman house from Alexandria showing the rooms arranged on two storeys with a central courtyard.



THE GYMNASIUM

Every Greek city had a gymnasium (plural *gymnasia*), and Alexandria was no exception. The gymnasium was attended by young free-born male citizens, or ephebes. They received military and athletic training, as well as an education in subjects like philosophy, rhetoric, music and poetry. Sometimes social or public gatherings were also held there, such as banquets, dinners, celebrations or ceremonies.

The geographer Strabo who visited Alexandria in early Roman times, thought that the most beautiful building in Alexandria was the gymnasium which had "porticoes over a stade in length", a stade being over 175 meters long. Normally there would be sports grounds and running tracks and an open court for sports such as wrestling and boxing. As Alexandria's gymnasium was in the center of the city, Strabo describes its running tracks as being arranged along the streets. Competitions were held in sports and military exercises such as javelin throwing and archery.

According to Greek custom, an athlete's body had to be covered with oil and dusted with powder before exercising. This is why one of the biggest running costs of a gymnasium was buying all the oil needed for the athletes. As well as the sports facilities and rooms for washing and bathing, the gymnasium would have had a library, classrooms and auditoria (lecture halls).



Details of mosaics from the "Villa of Birds" in Alexandria

URBAN VIOLENCE

Like in parts of some cities today, Alexandria's population was not always quiet and peaceful. At various times violence broke out between different sectors of the population for different reasons. During the Ptolemaic period, the people of Alexandria sometimes supported the claim to the throne of rival members of the royal family. For example in around 160 BCE the mob tried to murder King Ptolemy VI because they believed that he was planning to kill his own brother Euergetes who was more popular. Under Roman rule also, riots broke out between Jews and Alexandrians several times.

Sometimes the violence came from the rulers themselves. In 215 CE, the Roman Emperor Gaius Caracalla, known for his cruelty, ordered a terrible massacre of the local population. At other times there were clashes between the different religious communities, such as between some of the pagans and Christians during the fourth and fifth centuries.

Second century remains from ancient Alexandria

The remains of a street





GAMES AND FESTIVALS

THE RACES

One important place of entertainment was the race course, to the south west of Alexandria near the Serapeum. This served both as a hippodrome (for horse-races) and as a stadium (for athletics). It was called the Lageion, in honor of King Ptolemy I's father, Lagos. During the Greek period, it was used for holding games known as the Ptolemaieia after the royal Ptolemaic family. These games were rather like the Olympic Games in ancient Greece. There were gymnastics, musical contests and horse-racing. Then during Roman times it was especially used for chariot races. However, like modern stadiums today, it could sometimes even be used for quite different public events such as processions.

AUDIENCES

The people of Alexandria, especially during Roman times, were passionate about public entertainment, perhaps rather like spectators of rock star concerts, or supporters at football matches nowadays. The Greek writer Dio Chrysostom gave this detailed description of Alexandrian audiences: *"You sit dumbfounded, you leap up more violently than the hired dancers, you are made tense with excitement by the songs... Song is the occasion of drunkenness and frenzy... if you merely hear the twang of a harp string, you can no longer keep the peace as if you had heard the call of a bugle."*

FESTIVALS

One important form of public entertainment in ancient Alexandria was festivals. These could be religious, to honor the gods, or for another reason such as to honor the king or the Roman emperor. There would be singers, musicians and dancers, or sometimes animal baiting where dogs would bait wild beasts. During festivals, athletic competitions were often held. The winners could win money prizes paid for by the city. Athletic games in Ptolemaic Alexandria included sports such as foot races, boxing and wrestling. The competitors were sorted according to age: boys, youths and men. These games were usually held in the city's stadium or hippodrome and the spectators sat in rows of stone seats looking down on the participants.





The remains of an odeum in Alexandria today

MUSIC

Another kind of public entertainment was musical games. Musical contests included singing and playing of instruments such as the flute and lyre. These were normally held in a theater, especially a small theater called an odeum. The odeum discovered by archeologists at Kom El-Dikka, in Alexandria, was built in the Roman period. People could also go to watch plays in the theater. During festivals when plays were held, the actors sometimes won prizes.



Terracotta statuettes of female musicians



Part of a mosaic showing a pair of wrestlers



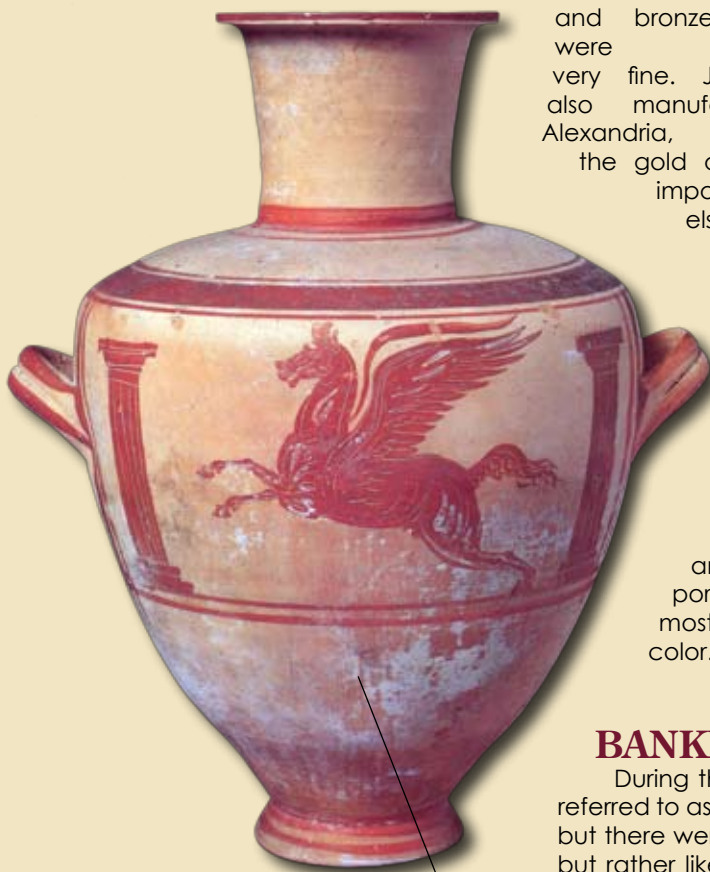
TRADE AND INDUSTRY

TRADE

Alexandria's location and its two harbors soon made it the most important trade center of the Mediterranean region. Luxury goods including spices, ivory, bronze lamps and perfumes were imported from the East to Alexandria or passed through the city on their way to elsewhere. One of the most important goods transported to Alexandria from the Delta was large quantities of grain. Customs (import and export taxes) were paid on all these goods passing through Alexandria contributing greatly to its prosperity. A number of its citizens became rich merchants. Of course many ordinary people were much poorer, but all this trade meant that people could easily find work.

CRAFTS AND INDUSTRY

There was a thriving shipbuilding industry, producing the many ships needed to transport all kinds of goods. Canals allowed transportation of goods inland across the Nile Delta. Products made in Alexandria such as glassware, textiles (especially linen), perfumes and papyrus, were exported to other countries. Alexandria was also reputed for certain arts and crafts: its mosaics and bronze sculptures were considered very fine. Jewelry was also manufactured in Alexandria, for which the gold or silver was imported from elsewhere.



MINING

There were mines and quarries, where the work was done by prisoners of war, slaves, convicts, and also by free laborers. Emeralds, topaz and other precious stones were mined. The porphyry and granite quarries were also an important source of revenue. The porphyry all came from a single quarry in the Eastern Desert and it was mostly shipped to Rome where it was highly valued for its reddish purple color.

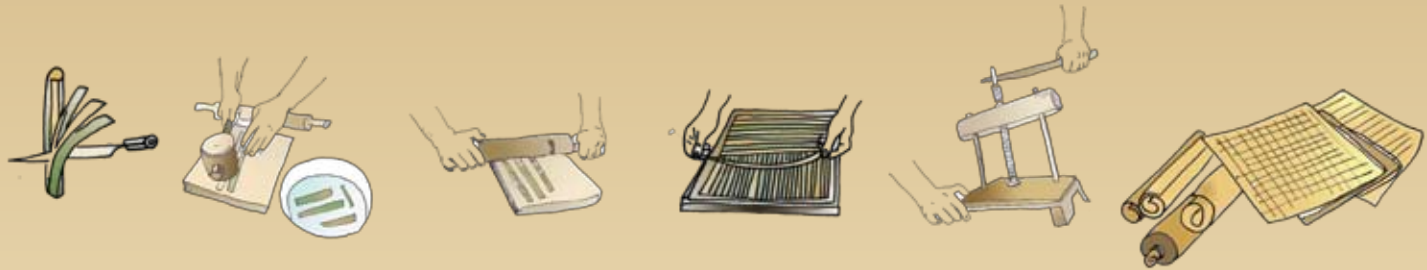
BANKING

During the Ptolemaic period the state controlled banking, the banks being referred to as "royal banks". Later under Roman rule, these banks became public, but there were also many private banks. Payments were made not only in cash, but rather like modern banking today, they could also be done by transferring credit from one bank account to another.

This kind of vase, known as a "Hadra" vase, was imported from the island of Crete.

PAPYRUS

Alexandria was the foremost producer in the Mediterranean region of a kind of paper called papyrus. Papyrus was made from the papyrus plant which grew in large quantities in the marshes situated inland near Alexandria.



Papyrus making

COINAGE

The Alexandrian mint produced coinage throughout the Ptolemaic period and during the Roman era until 296 CE. In fact, Alexandrian coins continued to be used as the main currency in Egypt during Roman rule, alongside the Roman coins. The majority of coins were made of bronze. There were also gold, copper and silver coins, such as the silver coin called the tetradrachma.



Mosaic making

Papyrus plants from which papyrus paper was made



FOOD AND AGRICULTURE

Egypt's economy had been based on agriculture since ancient times. A wide variety of crops had been grown since the Pharaonic period which continued to be cultivated in the Nile Delta during the Ptolemaic and Roman eras. These included cereals, beans, peas, lentils, vines, olives, marrows, radishes, leeks, cabbages, cucumbers, dates, watermelons and melons, pomegranates and figs, as well as fodder crops for livestock.

This ancient wall painting shows a bull turning a water wheel for irrigation. This method of irrigation still exists today.



IRRIGATION

Since ancient times in Egypt, the harvest depended on the annual flood of the River Nile, and on the system of canals which brought the waters of the Nile to irrigate the farm land. In order to keep the canals and dykes in good condition, the peasants were obliged to maintain them. By the end of the Ptolemaic era, however, this irrigation system was decaying, so when the Romans took over the country, Octavian actually ordered his troops to clean and deepen the canals.

Amphorae like these were used for storing and transporting food such as olives and olive oil, grapes and wine.

LAND OWNERSHIP

During the reign of the Ptolemies, the king, like the Egyptian Pharaoh before him, was considered to be the exclusive owner of all the land. In practice, fertile arable land was leased to tenants, whereas large areas of less fertile land were released from royal control.

When Egypt became a Roman province however, the land was transferred to the Roman people. Rome encouraged people to buy agricultural land, thus a lot of land became private property which was then taxable. With this came the growth in the number of peasant landowners.





THE GRANARY OF ROME

Wheat was the most important crop grown in Egypt, especially during the Roman period when it supplied much of the Roman Empire's wheat. According to the ancient historian Josephus, the Roman Empire obtained a third of its whole wheat supply from Egypt. In fact Egypt became known as the "Granary of Rome".



Wine making

WINE

During the reign of the Ptolemies, farmers were encouraged to grow grapes for wine making. The Ptolemies also taxed any foreign imported wines to encourage people to drink the local Egyptian wine which cost less. The population of Alexandria drank mostly wine and beer. Various types of vines were imported from Greece and elsewhere, to make wines of different price and quality, for wealthy and for poorer people. The Mareotic wine, which was made around Alexandria, was famous even in Rome.

FISH

Both the River Nile and the lakes in the Nile Delta were rich in fish, which had been an important element of the Egyptian diet since Pharaonic times. Some lakes were high in salt content, which was used for salting both fish and meat.



CULTS AND RELIGION

THE SERAPEUM

There were many temples in ancient Alexandria, but the most important of these was the temple dedicated to the god Serapis, known as the Serapeum. This great temple was famous throughout the ancient world during both Greek and Roman times.



DIOCLETIAN'S COLUMN

This column over 26 meters high was erected in honor of the Roman Emperor Diocletian in 298 CE to commemorate his victory over an Egyptian rebellion. It has however wrongly been named Pompey's Pillar.

The Serapeum was built on a hill to the south west of Alexandria during the reign of King Ptolemy III. Although little is left of it today, archeologists have made discoveries on the site where the temple once stood and it is described in ancient written documents.

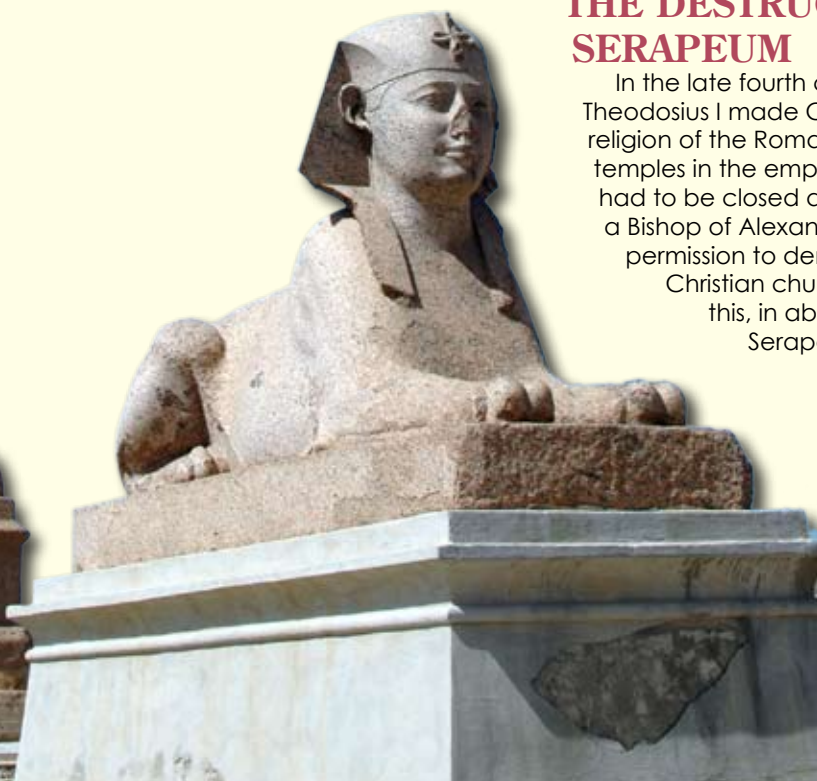
The Serapeum was built in a Greek style with Corinthian columns. It had a large, rectangular colonnaded court, with rooms behind the colonnades. The columns of the court were made of grey granite, whereas those of the temple itself were of red granite.

Archeologists have discovered underground passages in different places, but no-one today knows for certain what they were for. Ancient texts tell us that in 181 CE, the Serapeum was destroyed by fire and then rebuilt by the Romans to a larger size.



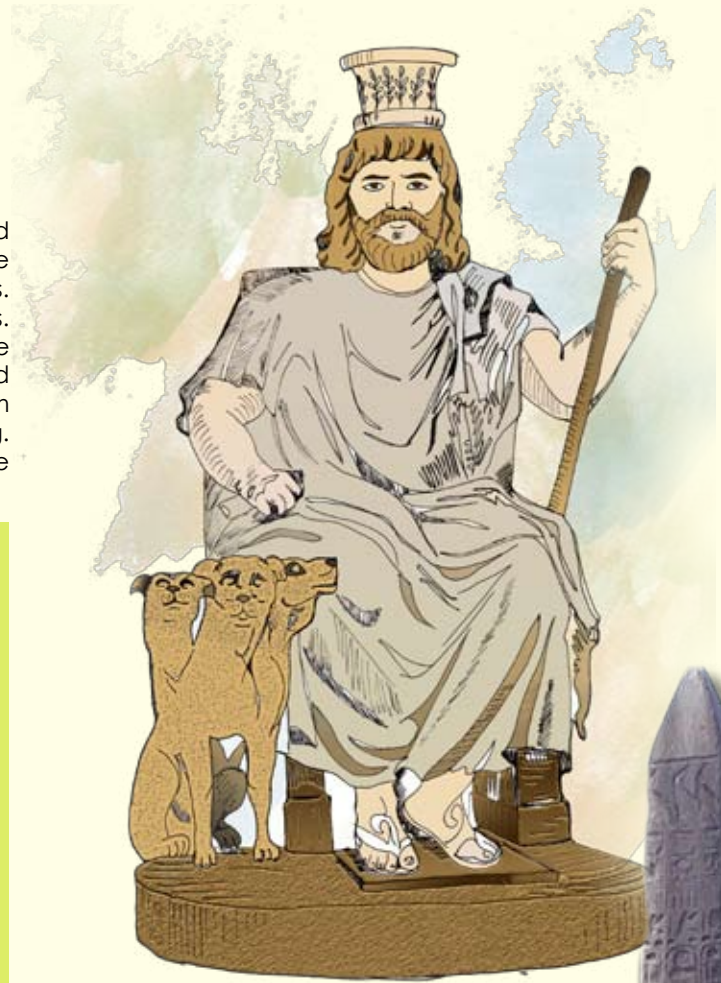
THE DESTRUCTION OF THE SERAPEUM

In the late fourth century, the Roman Emperor Theodosius I made Christianity the official state religion of the Roman Empire. As a result all pagan temples in the empire, including those in Alexandria had to be closed and abandoned. This was when a Bishop of Alexandria called Theophilus obtained permission to demolish temples and build Christian churches in their place. Following this, in about 391 CE a mob destroyed the Serapeum.



THE CULT STATUE

The Serapeum contained a huge statue of the god Serapis. This bearded god sat on a throne and by his side was the three-headed dog of the Underworld, Cerberus. This statue was made of wood, metal and precious stones. Its body was dark blue, and its clothes and sandals were decorated with gold and silver. Worshippers would sit and meditate to Serapis. They would sleep in the Serapeum hoping their dreams would bring them help or healing. Several other gods were worshipped there including the Egyptian god Apis and the Greek deity Zeus.



THE CAESAREUM

EMPEROR WORSHIP IN THE CAESAREUM

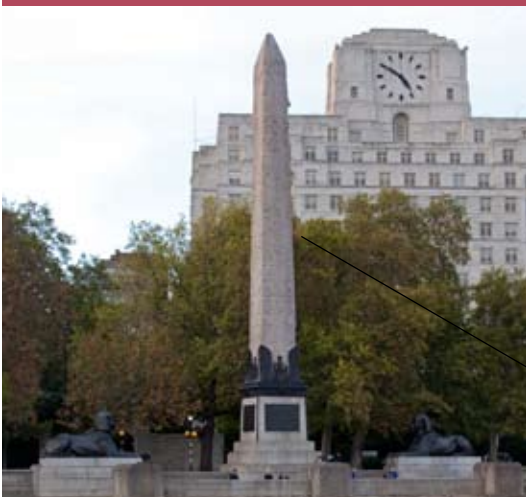
Ruler worship was an ancient Egyptian practice. So during the time of the Ptolemies, the Ptolemaic kings were also worshipped. When Alexandria fell under Roman rule in 30 BCE, Roman emperor worship was added to the other religious practices. The last Ptolemaic queen, Cleopatra VII, built a temple called the Caesareum, in honor of Mark Antony, which was used for ruler worship.

According to the Alexandrian Jewish writer Philo, the Caesareum, which faced the harbor, was huge. It was decorated with pictures, and gold and silver statues. It had porticoes, libraries, chambers, groves, gateways, wide paths and courts, all richly decorated. During the early fourth century, as Christianity spread, it was converted into a Church of Saint Michael and survived until the tenth century.

CLEOPATRA'S NEEDLES

In front of the temple of Caesar, the Caesareum, stood two granite obelisks known as Cleopatra's Needles. In fact, they dated back to 1450 BCE when they had once stood in the Egyptian city of Heliopolis, before being transported north to Alexandria many centuries later, during the reign of Emperor Augustus. Then, long after the disappearance of the Caesareum, these two obelisks were moved once again: during the nineteenth century the Viceroy of Egypt offered one to Great Britain and the other to the United States of America. So today, one of Cleopatra's Needles stands in London by the River Thames and the other is in New York's Central Park.

One of Cleopatra's Needles in London today



Although Alexandria was a Greek city, the Egyptian gods continued to be worshipped. The most widely worshipped of these were the goddess Isis, the god Osiris who was her husband and brother, and their son, Horus. Together, they formed a triad, or group of three gods. The cult of Isis was so popular, that her worship spread to other countries in the Mediterranean. It even became customary for the Ptolemaic queens of Alexandria to be depicted as the goddess Isis.



The Egyptian symbol of the winged sun.



This tomb is guarded by images of the Greek monster, Medusa.

The decoration in these underground tombs, or catacombs, shows details from both the Egyptian and the Greek religion.

SYNCRETISM

Although Egyptians still worshipped their own gods and the Greeks naturally worshipped theirs, there was a tendency for these two different religious beliefs and practices to mix. This process of mixing religious beliefs, called syncretism, took several forms. One form of syncretism was to associate an Egyptian god such as Ammon with a Greek god such as Zeus, so that both names were used for the same deity, which was then called Zeus Ammon.

SERAPIS

King Ptolemy I Soter decided that Alexandria should have its own patron god which should be acceptable to both Egyptians and Greeks. He did this by giving it a name which appealed to Egyptians and a body which attracted the Greeks.

Thus, this new god's name, Serapis, was a combination of Osiris and Apis. Osiris was the Egyptian god of the Dead, also called Apis when it took on the shape of a bull. The king then decided that this new god should have the human appearance of the most powerful of the Greek gods, Zeus.

Serapis became the most widely worshipped god in Alexandria for more than seven hundred years. A great temple called the Serapeum was built for the worship of Serapis.



PRIESTS

The Egyptian temples were served by Egyptian priests. Priesthood was a well paid position with special advantages such as receiving a portion of the animal sacrifices made in the temples. Large public festivals were held in honor of the different gods. In addition to long processions, there would be singers, musicians and dancers. Some religious festivals in honor of a specific god included athletic competitions, chariot races and plays.



Apis Bull

HARPOCRATES

The Egyptian god Horus, the son of Isis, took the form of the child-god Harpocrates. He was usually shown as a naked boy with his forefinger in his mouth.



ISIS

The cult of the Egyptian goddess Isis, the wife and sister of Osiris, was very important throughout Egypt. This goddess was often depicted wearing a crown consisting of a sun disc between cow's horns. In ancient Egyptian times, she was sometimes shown sitting on a throne, holding her young son, Horus.

In Alexandria, it became customary for the Ptolemaic queens to be depicted as the goddess Isis, wearing the sun disc crown. Under the Ptolemies, the cult of Isis spread to other countries in the Mediterranean, and later under Roman rule, to the rest of the Roman Empire.

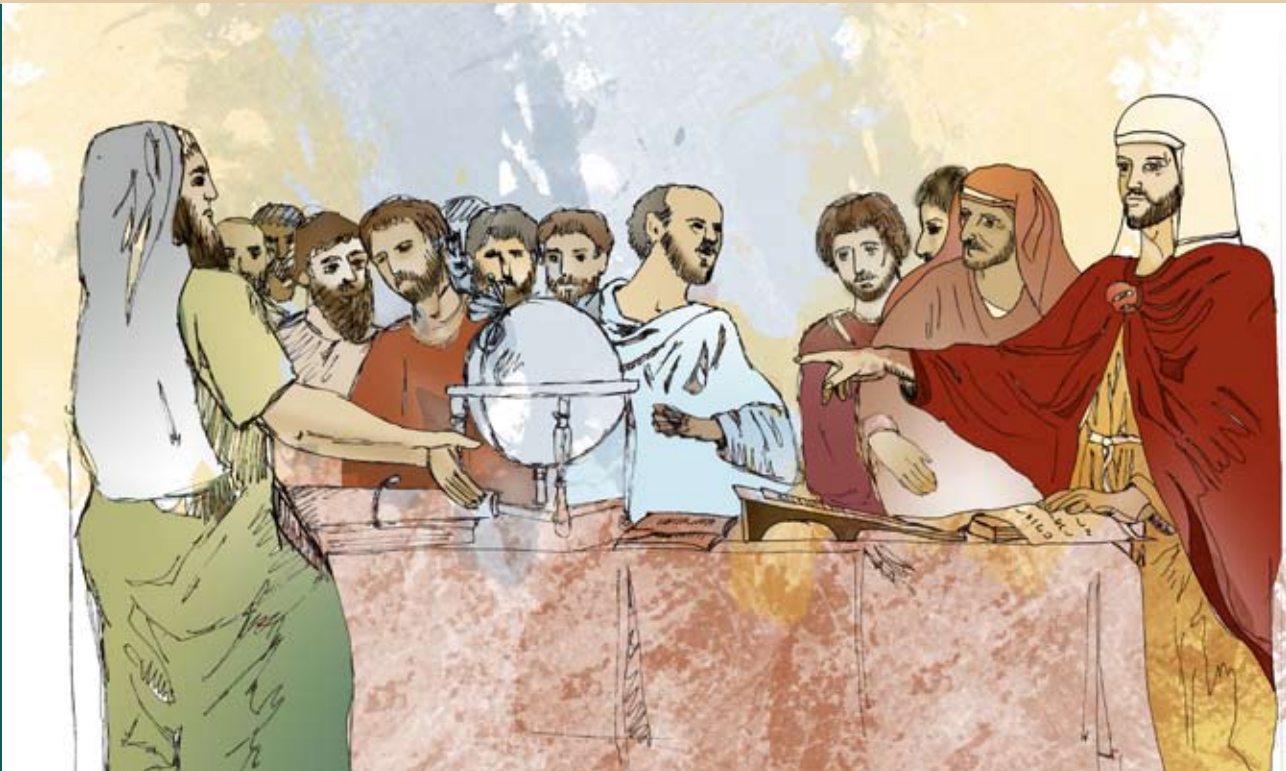
Isis was considered a protector and a mother. Over time, her appearance gradually changed from that of an Egyptian goddess to a Greco-Roman goddess with long flowing robes. In Alexandria, she was worshipped alongside the new god Serapis, who replaced Osiris as her husband. Likewise, her son, Horus, was replaced by Harpocrates, a Greek adaptation of the child Horus.



MONOTHEISM

During the first three centuries CE, the two monotheistic religions, that is religions believing in only one god, Judaism and Christianity, played an important role in the history of Alexandria. Unlike the pagans, both Christians and Jews refused to worship the Roman emperor. Both rebelled at various times and were persecuted. The most famous persecution took place under the Roman Emperor Diocletian in 309 CE. Then in 313 CE, Emperor Constantine decided that the Roman Empire would be tolerant towards all religions including Christianity. Finally, Emperor Theodosius established Christianity as the official religion of the Roman Empire and in 391 CE he ordered all the pagan temples including those in Alexandria to be closed.

King Ptolemy II speaking to the Jewish elders



THE SEPTUAGINT

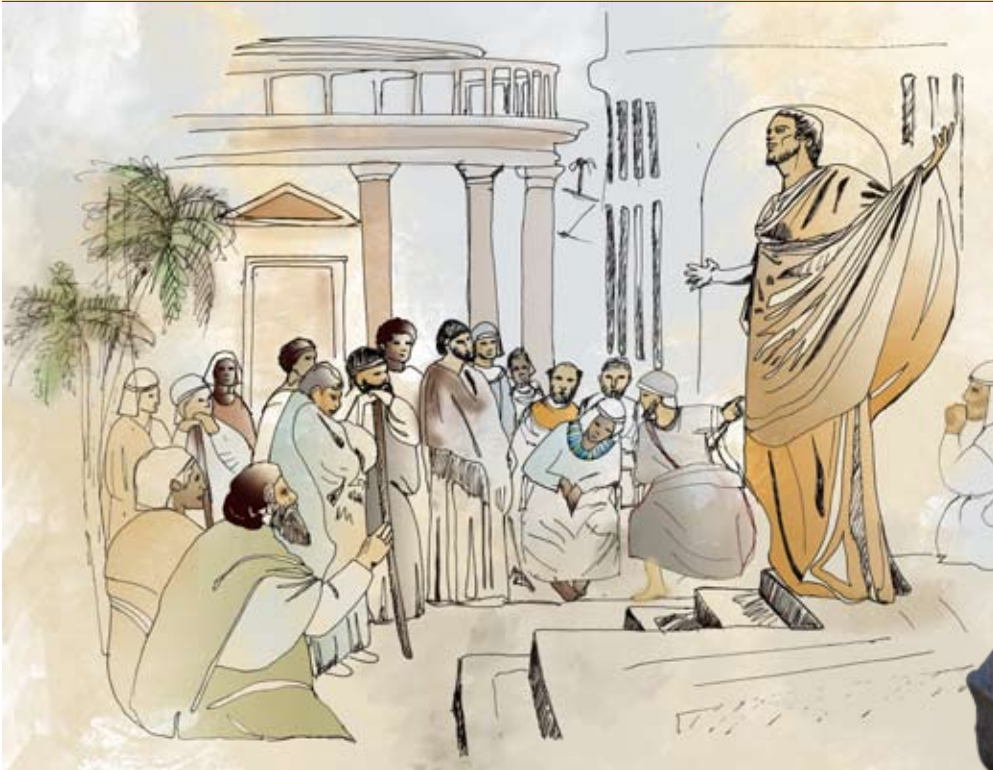
As more people came to settle in Alexandria, one of the largest communities became the Jewish community. Over time, the Jews spoke Greek like the other people in this city. This meant that the next generations of Alexandrian Jews could no longer easily read their sacred book, the Old Testament, which was in Hebrew. According to a writer called Aristeas, in order to solve this problem the Jewish high priest asked King Ptolemy II Philadelphus to have the Old Testament translated from Hebrew into Greek. Seventy-two translators were brought especially for the task. According to tradition they were put in separate cells on the Island of Pharos to set to work translating. Seventy days later they emerged from their cells with the translation completed. According to legend, their translations were all exactly the same! From that day onwards this first Greek translation of the Old Testament was called the *Septuagint*, meaning seventy in Greek.

The martyrdom of Saint Mark

The Pharos



A modern icon today, in the Greek Orthodox Church of Alexandria, representing Saint Mark who brought the gospel to Alexandria.



EARLY CHRISTIANITY

As Christianity spread in Alexandria, more and more churches were built, changing the city's appearance. Sometimes they were erected on the site of abandoned temples. By the end of the fourth century, a Church of Saint John the Baptist was built where the Serapeum had once stood, whereas the Caesareum was converted into a Church of Saint Michael. Christianity continued as the dominant religion in Alexandria until the Arab invasion of 642 CE, after which Cairo became the capital of Egypt and Alexandria gradually became less important.

These fragments of ancient columns and pottery discovered in Alexandria bear Christian motifs such as the cross and fish.



SAINT MARK

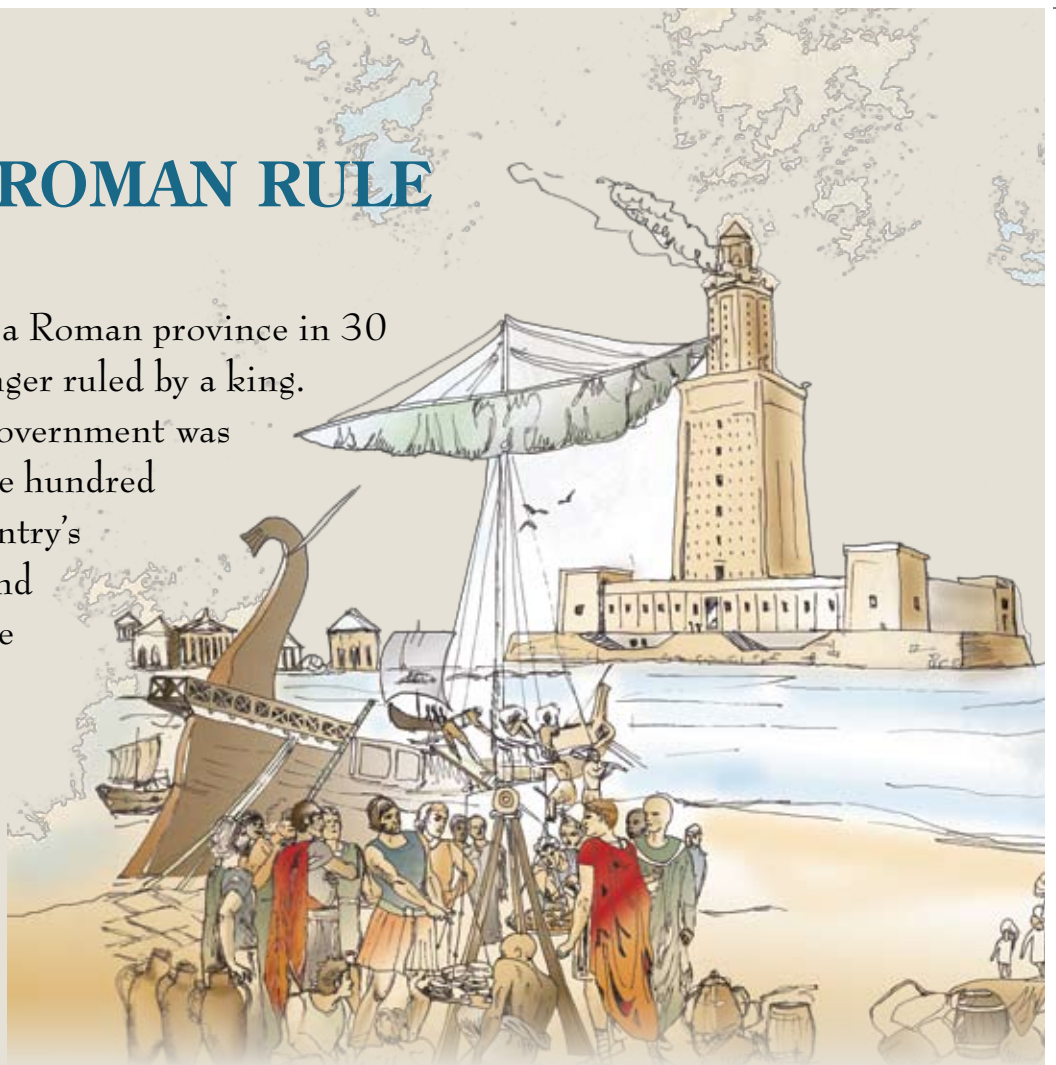
The apostle Mark the Evangelist arrived in Alexandria during the first century bringing Christianity to Egypt and Africa. He is believed to have performed a number of miracles in the city. In 68 CE he was murdered by pagans who resented his preaching Christianity to their pagan brethren. His Christian followers buried his body in a church in Alexandria. Centuries later in 828 CE some Italian sailors removed Saint Mark's relics and took them back to Venice where the Basilica of Saint Mark was built to house the martyred saint's relics. Recently in the 1960s, some of the relics of the saint's body were returned to Alexandria.

ROMAN RULE

A ROMAN PROVINCE

When Egypt became a Roman province in 30 BCE, it was no longer ruled by a king.

A new system of government was set up which lasted about three hundred years. Many of the country's resources such as wheat and papyrus were sent to Rome, the capital of the Roman Empire. Alexandria continued to prosper under Roman rule and its population reached about one million.

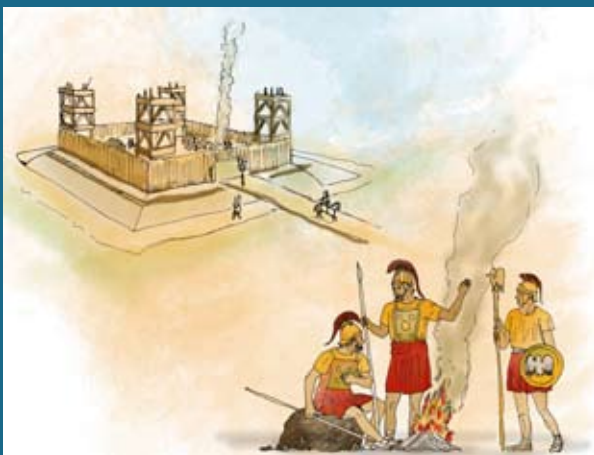


THE END OF THE PTOLEMIES

Gradually, the Romans interfered more and more in Egyptian affairs. Then in 48 BCE, the Roman general Julius Caesar put the exiled Queen Cleopatra back on the throne of Egypt and she bore him a son, Caesarion. After Caesar was murdered in Rome in 44 BCE, Marc Antony came to Alexandria in 41 BCE to test Cleopatra's loyalty to the Roman Empire. However, he stayed with her and she bore him three children. In 31 BCE Antony and Cleopatra took part in a great sea battle, the Battle of Actium, against Octavian — the future Emperor Augustus. The couple was defeated and later each took his or her own life. Octavian had young Caesarion put to death and so the Ptolemaic dynasty came to an end, and Egypt became a province of the Roman Empire in 30 BCE.

GOVERNMENT

A Roman governor, called a prefect, was sent to Alexandria to govern Egypt. The prefect usually stayed in office for three years. He had a vast organization of officials working under him to help him govern all aspects of the country. The magnificent palaces built by the Ptolemies in Alexandria's royal quarter now became the headquarters of the Roman prefect.



A Roman army garrison

THE ARMY

To keep control of the country, the Roman Empire kept an army in Egypt. Roman legions and garrisons were posted in different parts of the country including one permanent legion in Alexandria. A new district called the Nicopolis, or "city of victory", was built to the east of Alexandria where this legion camped.

In many ways the soldiers acted rather like a police force today. The officers and soldiers in the Roman army came from different parts of the Roman Empire such as Italy and Gaul (present day France).

The eagle was the ensign of the Roman legions



TAXATION

Many papyri have been discovered which tell us about the importance of taxes in Roman Egypt. The Romans established a strict system of taxation. There were many kinds of tax such as land tax, taxes on property, on animals and on specific goods such as salt and oil. There was a complicated system of tax collection and local

people could be forced to work as tax collectors. Many tried to avoid paying taxes, especially when the harvest was poor.

It is said that in Roman times, one quarter of all the tax revenue in Egypt went to Rome and another quarter to pay the Roman army in Egypt. The rest was spent on the upkeep of the farm land (building and repairing dykes, canals and dams), and on the administration (to pay the salaries of government officials).

EMPEROR AUGUSTUS

After the Battle of Actium, Octavian made Egypt into a province of the Roman Empire. His victory enabled him to take the title of "Augustus" and he became the first emperor of the Roman Empire.



A Roman ship arriving in the Bay of Alexandria

THE BYZANTINE EMPIRE

Towards the end of the third century CE, the great Roman Empire divided into two parts — the Eastern Roman Empire and the Western Roman Empire. Egypt became part of the Eastern Roman Empire, later known as the Byzantine Empire. The capital city of the Byzantine Empire was Byzantium, later renamed Constantinople (today Istanbul in modern Turkey).

ROMAN REMAINS IN ALEXANDRIA TODAY



Domestic quarter in Kom El-Dikka



The imperial bath complex in Kom El-Dikka

GLOSSARY OF NAMES

Abu Hamid Al-Andalusi was a Medieval Arab traveller who came to Alexandria in 1117 CE and saw the Pharos.

Archimedes was a Greek scientist and inventor who spent some years in Alexandria. One of his inventions, Archimedes' screw, is still used today for irrigation.

Aristarchus of Samos was the Greek astronomer who developed a heliocentric theory of the universe: the theory that the sun is at the center of the universe and that the planets revolve around it. However this idea was dismissed for many centuries.

Aristeas is the presumed author of a manuscript known as the *Letter of Aristeas* in which is described the circumstances which led to the first Greek translation of the Old Testament in Alexandria. This Greek translation is known as the Septuagint.

Aristotle was a Greek philosopher and the teacher of Alexander the Great.

Arrian was a Roman historian who wrote a famous account of Alexander the Great's life.

Arsinoe II was the wife and sister of King Ptolemy II Philadelphus.

Bartholdi was a French sculpture who visited Egypt in the nineteenth century. He was inspired by ancient statues of the goddess Isis-Pharia to design the Statue of Liberty in New York.

Berenice II was the wife of Ptolemy III Euergetes. She offered a lock of her hair to the goddess Aphrodite for the safe return of her husband from war. When the lock was stolen, the court astronomer said that the gods had transformed it into a cluster of stars which then became known as the Lock of Berenice.

Callimachus was a poet and scholar who worked at the Library of Alexandria. He created a catalogue of all the scrolls in the library, consisting of 120 volumes. It is considered to be the first library catalogue.

Caracalla was a Roman emperor noted for his cruelty who ordered a massacre in Alexandria in 215 CE.

Caesarion was the son that Queen Cleopatra bore Julius Caesar. He was put to death by the order of Octavian after the defeat of Mark Antony and Cleopatra at the Battle of Actium in 31 BCE.

Cleopatra VII was the last ruler of the Ptolemaic dynasty before the Romans began to rule Egypt.

Darius III was the emperor of Persia. Alexander the Great defeated him and the Persian army at the Battle of Issus in 333 BCE.

Deinocrates of Rhodes was the Greek architect who designed the plan of Alexandria.

Demetrius of Phalerum was a Greek poet and philosopher who advised King Ptolemy I to build the great Library of Alexandria.

Diocletian was a Roman emperor who suppressed a rebellion in Alexandria in 298 CE. To commemorate his victory and column was erected at the Serapeum, or Temple of Serapis, in Alexandria.

Dio Chrysostom was a Greek writer and historian who visited Alexandria.

Eratosthenes was a scientist, astronomer and mathematician who is known above all for being the first person to calculate the Earth's circumference.

Euclid, one of the most important mathematicians of the ancient world, lived and worked in Alexandria. His ideas are still taught in schools today.

Galen was a Roman physician and surgeon who spent several years in Alexandria. His anatomical discoveries, made by dissecting bodies, were to have a great influence on the development of medicine.

Heron was a mathematician and inventor who worked at the Library of Alexandria.

Herophilus of Chalcedon was a physician who worked in Alexandria. He made many discoveries about the human body by dissecting dead bodies.

Homer was considered the greatest Greek poet. He is thought to have appeared to Alexander in a dream, telling him where to build the city of Alexandria.

Hypatia was an important mathematician, astronomer and philosopher who taught in Alexandria. She became a famous teacher who had considerable influence on her pupils.

Isis-Pharia was the goddess of the Pharos of Alexandria. She was believed to protect sailors and ships.

Josephus was a Romano-Jewish historian.

Julius Caesar was a powerful Roman general who invaded Egypt in 48 BCE. He made Cleopatra VII queen of Egypt instead of her younger brother, Ptolemy XIII.

Manetho was an Egyptian priest and historian who compiled a list of all the kings of Ancient Egypt, which is still used by historians today.

Mark Antony was a Roman politician and general who came to Egypt in 41 BCE. He fell in love with Queen Cleopatra and she bore him three children.

Mark the Evangelist, author of the Gospel of Mark, came to Alexandria in the first century, bringing Christianity to Egypt and Africa.

Octavian was a Roman leader who defeated Mark Antony and Cleopatra at the Battle of Actium in 31 BCE. Later he became the Emperor Augustus.

Philip II was the king of Macedonia and the father of Alexander the Great.

Philo was a Jewish philosopher living in Alexandria who was one of the first people to combine religious and philosophical ideas.

Plutarch was a Greek historian who wrote about Antony and Cleopatra.

Ptolemy I Soter was a great general in Alexander the Great's army, before he became king of Egypt after Alexander's death. He built the Mouseion and the great Library of Alexandria.

Ptolemy II Philadelphus was the second king of the Ptolemaic dynasty. He played an important role in developing the Library of Alexandria.

Ptolemy: Claude Ptolemy was an Alexandrian astronomer who believed that the Earth was at the center of the universe. He was very influential and his maps were followed for many centuries until the arrival of Copernicus.

Qaitbey was the sultan who ruled Egypt from 1468–1496. He built many important monuments including Qaitbey citadel in Alexandria, where the Pharos once stood.

Serapis was a new god created by Ptolemy I. This divinity had Egyptian and Greek characteristics so that it would appeal to both the Egyptian population and the Greeks who had settled in Alexandria.

Sostratos of Cnidos was the architect of the Pharos, the great Lighthouse of Alexandria.

Strabo was a Greek geographer and historian who visited Alexandria in Roman times. He wrote detailed descriptions of what he saw in Alexandria.

Theocritus was a well-known poet who spent some time in Alexandria.

Theodosius I was the Roman emperor who ordered the closure of all pagan temple in the Roman Empire. This led to the destruction of the Serapeum of Alexandria in 391 CE.

Theophilus of Alexandria was the Bishop of Alexandria at the time when the Roman Emperor Theodosius ordered the closure of all pagan temples in the empire.

INDEX

Abu Hamid Al-Andalusi	16	Hypatia	25
Alexander the Great	6-7, 8-9, 10, 30	Isis	12, 17, 19, 40-41
Aphrodite	26	Isis-Pharia	17, 40-41
Apis	39-41	Josephus	28, 37
Archimedes	17, 22, 25	Lagos	32
Aristarchus of Samos	24-25	Manetho	27
Aristeas	42	Mark Antony	14-15, 39, 44
Aristotle	6	Muses	20
Arrian	9	Octavian	15, 36, 44-45
Arsinoe II	11, 21, 27	Orestes,	25
Augustus	15, 19, 39, 44-45	Osiris	40-41
Bartholdi	17	Philip of Macedonia	6
Berenice II	26	Philo	27, 28, 39
Bucephalus	6	Plutarch	14, 21
Caesar, Julius	12-13, 21, 25, 44	Poseidon	16
Caesarion	12, 15, 44	Ptolemy, Claudius	24-25
Callimachus	20, 26-27	Ptolemy I	7, 10-11, 16, 20, 32, 40
Caracalla	31	Ptolemy II	11, 16, 20-21, 27, 42
Cerberus	39	Ptolemy III	25, 26, 38
Cleopatra VII	12-15, 39, 44	Ptolemy VI	31
Conon of Samos	26	Ptolemy XIII	12-13
Constantine	42	Qaitbey	17
Copernicus	24	Saint Mark	43
Darius III	6	Serapis	38-40
Deinocrates of Rhodes	9	Shakespeare	14
Demetrius of Phalerum	20	Sosigenes	25
Diocletian	38, 42	Sostratos of Cnidos	16
Dio Chrysostom	32	Sotades of Maroneia	21
Eratosthenes	24-25	Strabo	11, 31
Euclid	22, 25	Theocritus	27
Galen	23, 25	Theodosius I	21, 38, 42
Harpocrates	41	Theon	25
Heron	23, 25	Theophilus	21, 38
Herophilus	23, 25	Trajan	28
Homer	8, 26	Zeus Ammon	7, 26, 40
Horus	40-41	Zeus	26, 39, 40

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