

GREEK AND ROMAN ARCHITECTURE

Fascinating Facts

- The ancient Greeks and Romans used pulleys and ropes to create a type of crane for lifting heavy stones into place as they built a new structure.
- Just as people do today, the ancient Romans built “fast-food” shops that sold takeout food and restaurants that offered outdoor seating.
- By A.D. 300, there were eleven public bathhouses and as many as one thousand privately owned bathhouses in the city of Rome.

Genre	Comprehension Skill	Text Features
Nonfiction	Main Idea and Details	<ul style="list-style-type: none"> • Captions • Sidebars

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The ancient Greeks and Romans made advances in designing and erecting buildings that are still used all over the world today. In this book you will read about numerous Greek and Roman structures and learn how each one both influenced and was influenced by the lives of Greek and Roman citizens.



Vocabulary

democracy

architecture

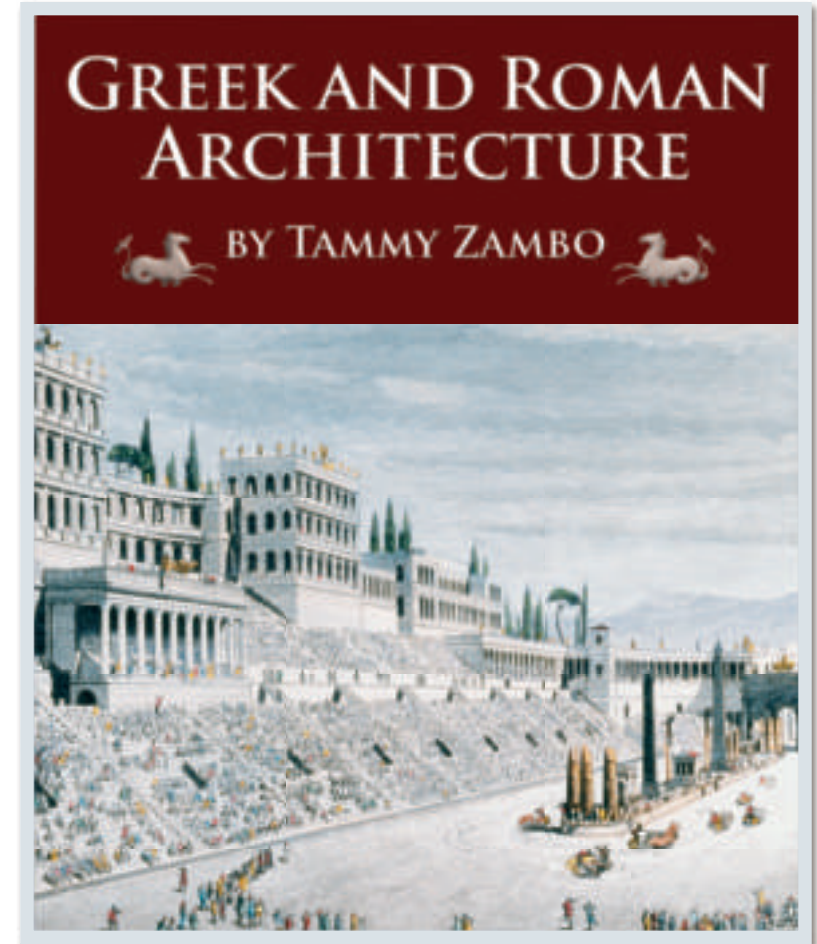
agora

immortal

innovation

emperor

gladiator



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A Lasting Influence

In today's fast-paced world, people are constantly encountering new objects and improvements in technology that offer possibilities they have never considered before. Some aspects of life, however, are not based on the new but on the old. For example, the United States is a **democracy**, a form of government that was first developed in ancient Greece. Likewise, many modern languages are based on Latin, the language used in ancient Rome.

The **architecture** of buildings around the world today also reflects the lasting influence of ancient Greece and Rome. Architecture is the art and science of designing and erecting buildings. A culture's architecture tells a great deal about the way people live, and, in turn, the way they live shapes their architecture.



A Place for Ideas

One of the busiest places in Athens was the **agora**, or marketplace. In addition to merchants' shops and stalls, the agora included public buildings such as the city offices and law courts. They also included buildings called *stoas*.

A *stoa* (STOH-ah) was a wide building with a roof and an open front supported by a row of columns. *Stoas* were places where men conducted business and gathered for discussions. Philosophers also spoke or taught their students at the *stoas*. A group of philosophers called the Stoics even got their name from these meeting places.



Greek Temples

The ancient Greeks worshipped many deities. To each one of these **immortal** gods and goddesses they built and dedicated a separate temple. The temples were not houses of worship like the ones we know today. Instead they were considered to be the places where the deities stayed when they visited the earth. A temple was a god's or goddess's house, and a statue or other image of the deity was the temple's main occupant. People visited temples only on regular festival days and at special times when they wanted to ask for a deity's favor. Many temples had altars outside where these visitors could leave small tokens or portions of food as an offering to the deity.

The Parthenon is the best-known Greek temple. It stood prominently on the highest hill in Athens, the Acropolis, where many other temples and sacred buildings were located. The Parthenon was dedicated to Athena, the goddess of war, wisdom, and crafts. Athena was also considered to be the guardian of Athens, and it is for her the city is named. Because Athena was the most important deity to Athenians, the Parthenon was the largest temple in the city.



Athena's Sacred Space

The architecture of the Parthenon reflects how temples were used in the Golden Age of ancient Greece. The outer part of the temple consisted of a portico, or porch, with an impressive Doric marble *colonnade*, or row of columns, around all four sides. Inside this colonnade, a shorter row of columns appeared at each end of the temple. Next was the *cella* (SEL-eh), a vast inner chamber with four walls made of stone blocks that were joined together with metal clamps. The *cella* was divided into two rooms. In the main room a wooden statue of Athena rose 40 feet (12 meters) into the air and was covered with more than a ton of ivory and gold. A pool of water glimmered at the statue's feet to reflect light from the doorway onto the statue. The smaller room of the *cella*, in the rear of the temple, was a treasury that housed other statues, jewels, and vases paid as tribute to Athens by the Delian League.

Each summer, to honor Athena's birthday, all of Athens held a huge festival called the Panathenaea (pan-AH-thee-NAH-ay-ah). The highlight of the festival was a grand procession near the beginning. In the procession, most of the people of Athens would march through the city to the Acropolis along a route known as the Panathenaic Way. In a formal ritual at the Acropolis, they would present a new robe to be draped over a statue of Athena in a temple called the Erechtheum (ih-WRECK-thee-uhm). Then a ceremonial feast would be held.

Every fourth year, the celebration called the Great Panathenaea was bigger still and lasted six days. This festival began with poetry and music contests, followed by athletic contests, called the Panathenaic Games, and other contests held over five days. The great procession and feast took place on the sixth day.



The Parthenon was built between 447 and about 432 B.C.



The Design of a Greek House

The Mediterranean climate of Greece is warm most of the year, and the Greeks' houses were designed with this in mind. Most houses featured a central courtyard with rooms on at least three sides and possibly on an upper floor as well. The rooms usually had only small open windows with wooden shutters, because the Greeks valued their privacy. Baked clay tiles covered the roof, allowing rainwater to fall from them evenly.



This picture shows a large house that a fairly wealthy Greek family would have lived in. Notice the *andron* with its dining couches on the main floor.



The houses were designed so that the courtyard was shaded and cool during the many hot months of the year. Some also had a balcony over the courtyard that was open to the air but had a roof, so that it always provided shade. The courtyard was a gathering place for the family. The house also contained an indoor altar, where the family would pray daily and present offerings to the gods and goddesses.

If a house was large enough, certain rooms were designated specifically for women, and others were for men. This arrangement reflected the fact that men and women lived very separate lives, and women did not socialize publicly with men. One of the primary rooms in the house was the *andron*, or dining room, where the man of the house would entertain male guests. Because the Greeks ate while reclining, they often used dining couches rather than chairs. The *andron* was designed with a low platform around the edges to hold several dining couches.



The First Theater

One of the ancient Greeks' most important contributions to later civilizations, including ours, was the performance of plays, as well as the theater structure itself. The first plays were performed in the agora, but as they grew increasingly popular, performances were moved to a slope of the Acropolis, which naturally formed a kind of semicircular auditorium. At first the audience sat on this slope in wooden seats and looked down on a bare central area that became the stage. Later, the seats were made out of stone, and a wooden framework behind the stage was erected for hanging scenery. Actors could also climb onto the roof of the framework to perform certain scenes. This framework was called a *skene* (skeen), from which we get the words *scene* and *scenery*.

The most famous Greek playwrights were Aeschylus (ES-kih-lehs), Sophocles (SOF-uh-kleez), and Euripedes (yoo-RIP-eh-deez). Many of their plays resembled modern-day musicals, because they included a chorus of twelve to fifteen men. All of the speaking roles in a play, including female roles, were played by just three men who had to change costumes often.



Architecture Advances

The Romans copied many features of Greek art, including the architecture of their temples and other buildings. The Romans, however, developed **innovations** in building materials that made new building designs possible as well.

One of the most remarkable buildings in ancient Rome was the Pantheon, a temple dedicated to all the gods and goddesses. Like Greek temples, it was built with a portico supported by columns. Its *cella*, however, used a completely new building design. It was round and it was topped with a massive dome. At the very top of the dome was an opening called an *oculus* (AHK-yeh-lehs). The dome represented the heavens, and the *oculus* represented the sun.

The round room and dome in the Pantheon were made possible because the Romans invented concrete. The Greeks had used wood, different types of stone, brick, and marble. When the Romans blended stone or brick with water, lime, and volcanic earth, the product was much stronger than other materials. This concrete allowed the Romans to build stronger arches and curved roofs called *vaults*. These techniques could be combined in a dramatic way to build structures such as the Pantheon.



The Pantheon was built between A.D. 118 and 125.



Architecture at Home

Only a wealthy family could afford to live in a Roman house, called a *domus* (DOM-uhs). The center of the *domus* was the *atrium* (AY-tree-uhm), or hall, with an opening in the ceiling over a small pool. The atrium usually held a *lararium* (lah-RAHR-ee-uhm), a shrine dedicated to the household gods. Surrounding the atrium were the *triclinium* (try-KLIN-ee-uhm), or dining room, furnished with dining couches like the Greeks used, the kitchen, and a study. Bedrooms were located either off the atrium or sometimes on an upstairs level. Rooms next to the street were often rented out as shops. Windows were small. In the back of the *domus* was an open-air garden surrounded by a colonnade, called a *peristyle* (PEHR-ih-stile). The walls of a *domus* were often painted in intricate patterns, and the floors might be decorated with beautiful mosaics. The house might even include a latrine and running water.



Roman Religion

The Romans borrowed most of their deities, like their architectural styles, from the Greeks, and gave them new names. Zeus became Jupiter and Hera became Juno.

The Romans observed other religious practices as well. During the Roman Empire, they worshipped their **emperor**. Romans also believed that their ancestors' spirits, or *lares* (lahr-EEZ), watched over their homes and families. Other household gods, *penates* (peh-NAY-teez), watched over a family's food. The *lares* and *penates* were worshipped in a special shrine within each home. Furthermore, as the Romans' conquests brought them into contact with people of other cultures, some Romans adopted the belief systems of those cultures, including Judaism and Christianity.

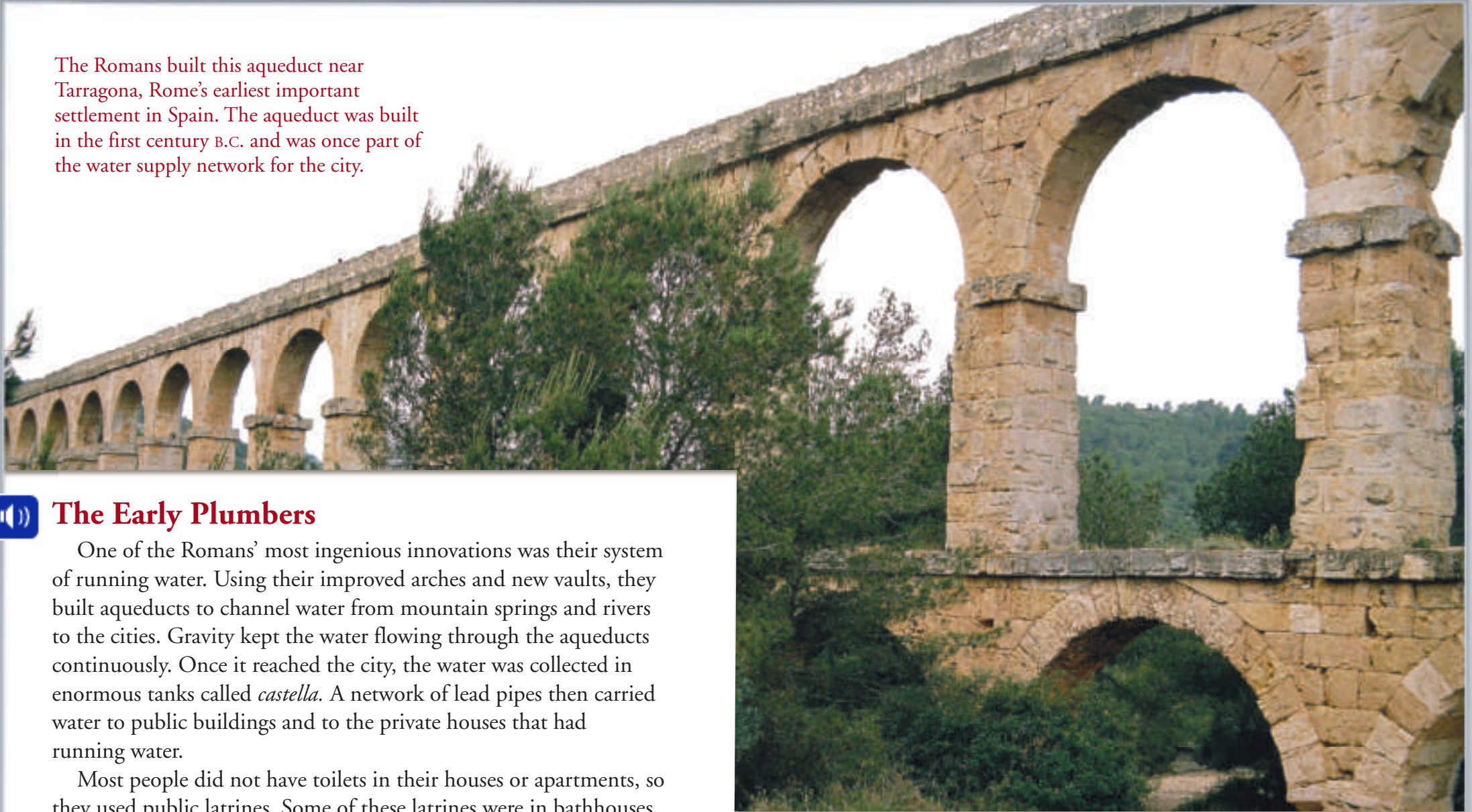


This is a picture of a *domus*.



Most Romans didn't have houses but lived in crowded apartment buildings, called *insulae* (IN-seh-lee). Many *insulae* were several stories high and poorly built, with wooden frames and floors that often caught fire. They had large windows, but sometimes these provided light for the whole building. In time, laws limited the number of floors an *insula* could have, but evidence suggests that building owners ignored the laws.

The Romans built this aqueduct near Tarragona, Rome's earliest important settlement in Spain. The aqueduct was built in the first century B.C. and was once part of the water supply network for the city.



The Early Plumbers

One of the Romans' most ingenious innovations was their system of running water. Using their improved arches and new vaults, they built aqueducts to channel water from mountain springs and rivers to the cities. Gravity kept the water flowing through the aqueducts continuously. Once it reached the city, the water was collected in enormous tanks called *castella*. A network of lead pipes then carried water to public buildings and to the private houses that had running water.

Most people did not have toilets in their houses or apartments, so they used public latrines. Some of these latrines were in bathhouses, facilities that met many needs. Bathhouses were places where Romans could exercise, bathe, get a massage, snack, and relax. Some bathhouses even included a library. The elaborate architecture of the baths featured many rooms and a sophisticated heating system so that a visitor could bathe in separate hot, lukewarm, and cold pools—or all three in succession.



The Romans' drainage system was equally well designed. An intricate web of drains and pipes under the streets removed waste water and sewage and took advantage of water already flowing through them. For example, many latrines were flushed with used water that had already drained from public fountains or bathhouses.



The Circus Maximus

Another popular Roman pastime was attending chariot races at the Circus Maximus, an enormous racetrack. A full day's program at the track included twenty-four races. Foot races, trick-riding shows on horseback, and games between **gladiators** also sometimes took place at the Circus Maximus.

In the center of the Circus Maximus was a long, low structure called the *spina* (SPY-nah). It was decorated with statues, trophies, and a row of large movable egg- or dolphin-shaped counters that were turned over one at a time at the start of each lap in a race.

Built into one end of the oval were twelve starting gates. At the start of a race, a system of catapults opened all the gates at the same moment. Teams of two, four, or even up to ten horses burst out of the gates, each pulling a chariot with one charioteer. The teams raced seven laps counterclockwise around the *spina* at top speed. Teams risked crashing into each other, especially on the turns. Charioteers were often killed or injured in such collisions. Many did not survive past their early twenties.

The Circus Maximus could seat hundreds of thousands of people. As in a stadium like the Colosseum, the stands were a permanent structure built around the track. Vaulted areas below the seats supported the structure, and audience members climbed stairways in these areas to reach the higher seats. The stone seats closest to the track were reserved for the Roman senators. The poorest spectators had to stand high above the track, farthest from the action. The emperor enjoyed a special "boxed seat" along one side, decorated with columns like a small temple.



Borrowing and Innovating

The architecture of the ancient Greeks and Romans display great skill and imagination. From the temples for their gods and goddesses to their open-air houses, many of the Greeks and Romans' achievements still stand today.

Examples of ancient Greek architecture include the Parthenon, the auditorium in the Acropolis, and their houses. The Romans borrowed much of their architecture from the Greeks, as well as developed their own innovations. The Romans' use of concrete allowed them to build domed structures. They also built aqueducts to make the best use of their water and outdoor racetracks for entertainment centers. How the Greeks and Romans lived is reflected in the way they built their structures, as their structures reflect the way they lived.



The Circus Maximus was built in the sixth century B.C. Many emperors, including Caligula and Nero, were great fans of the chariot races.

Glossary

agora the outdoor marketplace and center of government in Athens

architecture the art and science of designing and erecting buildings

democracy a government by the people

emperor the ruler of an empire

gladiator a professional Roman fighter

immortal able to live forever

innovation something newly introduced



Write to It!

Ancient Greeks and Romans constructed buildings that met their needs and could be built using available materials. Which of the structures in this book do you think is best designed to meet the needs of the people who used it? Why? Write three or four paragraphs that explain your answers.

Write your explanation on a separate sheet of paper.

Photographs

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