## Architecture

Some would argue that Western Civilization began in ancient Greece, during the "Golden Age" which span 480-430 BC. An explosion of creativity resulted in an unparallel level of excellence, in art, architecture, drama, poetry, philosophy, government, law logic and mathematics.


Even in modern time, architecture imitates those elements that the Greeks developed. During the rein of the Roman Empire, Romans borrowed their ideas from the Greeks to create their own Greco-Roman style and transmitted this cultural mix to all of Western Europe and Northern Africa.


Roman architecture used Greek forms but developed new construction techniques like the arch to span greater distances than the Greek's "post and lintel" system (two vertical post with a horizontal beam). The invention of concrete allowed more flexible designs, as in the barrel-vaulted roof and the huge circular domes.


## Roman Architecture: The Colosseum

The Colosseum was built as a large-scale entertainment venue by the emperors of Rome to distract the masses from their grievances. It seated 50,000 spectators. For the opening act in A.D. 80, the entire arena was flooded to stage a naval battle reenacted by a crew of 3,000. Combat between gladiators were popular while the half time show featured the execution of criminals followed by man-verses-beast contests. Early elevators raised hundreds of starving lions in cages to attack unarmed Christians or slaves.


Still one of the world's largest buildings in terms of sheer mass, the Colosseum was so efficiently laid out that it inspired present-day stadium design. Each spectator had a seat number corresponding to a certain gate, which allowed smooth crowd flow through miles of corridors and ramps. Three types of columns framed the 161 foot high structure, using the Doric order at the base, Ionic in the middle, and Corinthian above-the typical design sequence for a multistoried Roman building. The balanced of vertical columns and horizontal bands of arches unified the exterior, relating the enormous façade to a more human scale.

## Pont du Gard, Nimes



Beginning in the $4^{\text {th }}$ century B.C., Romans constructed huge aqueducts to carry water for distances up to 50 miles. These structure were built on continuious gradual declines to transport water by forces of gravity. On the Pont du Gard aqueduct, which carries 100 gallons of water a day for each inhabitant of the city, each large arch spanned 82 feet.

## Greek Architecture

Monuments were treated by the Greeks as large sculptures and were built with the same rules of symmetry and ideal proportions. Public rites took place in front of the temple, where elaborate sculpture told the story of the temple's deity. The most common locations of the sculpture were the triangular pediments and horizontal frieze.

## Doric Order

The phrase "Doric Order" referred to all the standard components of a Doric temple, typically found on mainland Greece.


## Ionic Order

The "lonic order" was more widespread in the Greek settlements of Asia Minor and the Aegean.


## Corinthian Order

The "Corinthian order" its columns topped by stylized leaves of the acanthus plant, developed much later. It was not widely used on exteriors until Roman times.


