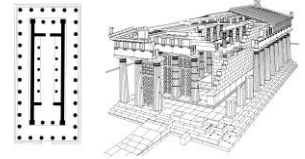


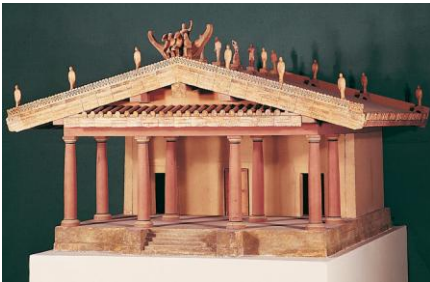
## TEMPLES

It's been said that captive Greece conquered victorious Rome and the Romans adopted many ideas in painting and sculpture from the Greeks.

- Roman temples were also strongly influenced by Greek temples.

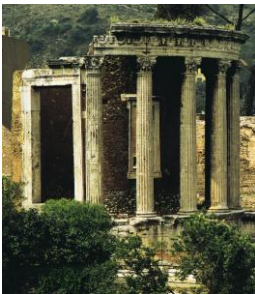


5.25 The facades of many Roman temples are strikingly similar, but one looks at a side view, the changes are apparent. Roman temples are set on high podiums, as were their Etruscan prototypes. 9.2



Model of a typical Etruscan temple of the sixth century BCE

- One entered the temple from the front only, up a flight of stairs that directed the worshipper into a deep porch, much deeper than the porches of Greek prostyle temples.
- The columns are monolithic (10.3) rather than constructed of drums, which were the Greek custom, and temples are often pseudoperipteral.



10-03 Temple of Vesta (?), Tivoli, Italy, early first century BCE.

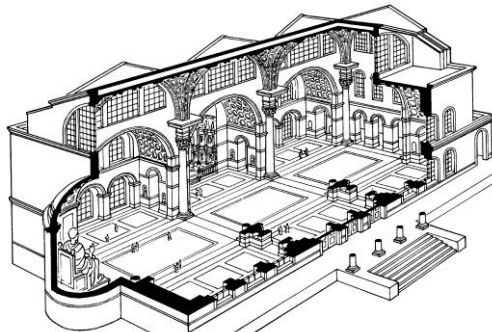
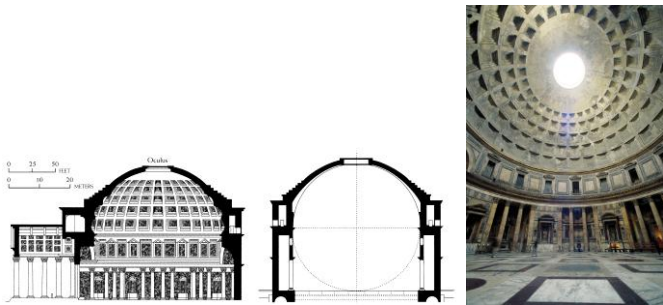
Although they appear to have a colonnaded peristyle all around because they are attached to the wall of the cella as engaged columns rather than standing fully free, as they would have on a Greek temple.



10.2 Temple of “Fortuna Virilis” (Temple of Portunus), Rome, Italy, ca. 75 BCE.

■ The Romans were much more concerned with interior space than the Greeks had been and through the use of the arch and the dome they learned to manipulate space in very creative ways. Roman architect-engineers sought practical solutions to problems, and explored interior spaces of many types, making excellent use of *poured concrete*.

■ The combination of the strength of the material and flexibility it allowed, along with the strength of the curves of the arch made it possible for architects to vault much greater spaces than ever before. The possibilities were explored in such structures as the Pantheon 10.49,10.50 and the Baths of Caracalla 10.68 and the Basilica of Constantine 10.79.



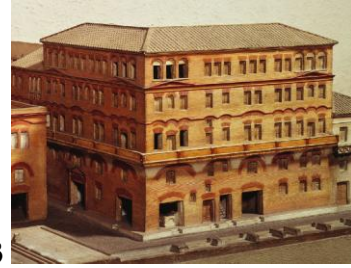
■ Roman engineers used the strength of the concrete and the arch to construct great projects like the Pont du Gard 10.31



10.43



10.53



10-53 Model of an insula, Ostia, Italy, second century CE.

10-43 APOLLODORUS OF DAMASCUS, aerial view of Markets of Trajan, Rome, Italy, ca. 100–112 CE.

While concrete faced with brick was used extensively for everyday buildings like market buildings 10.43 and multistory insulae 10.53 that housed the common people. Marble facing was commonly used on the great civic buildings that changed the face of Rome, but underneath, most of them were constructed of concrete.

■ The Roman concern with interior space is apparent in the interior of the



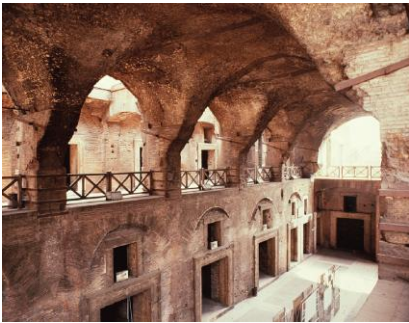
Pantheon 10.50 One of the most influential buildings in the history of art.

■ Both the inner diameter and the height of the great dome measure 142 ft. It was constructed of concrete, and the tremendous weight of the dome was somewhat lightened by the deep coffering. Coffers are the ornamental panels that are sunk into the dome. Light enters the building only through the great oculus (circular eye) in the center of the dome. Which measures 30 feet in diameter. Deep recesses have been cut into the walls, which are 20 feet thick. The circular building was entered through a porch whose monolithic Corinthian columns supported an architrave and pediment.

■ The vast interior space provided the Roman with completely different type of architectural experience. An enclosure of vast interior space that does not imprison one, this type of space became the hallmark of the Roman architect. This enclosure wallowed the Romans to create huge buildings using a seemingly simple plan with the arch and concrete.

■ The Romans made their greatest contribution to the history of architecture through their development of various types of vaults. The first, *the barrel vault* = it is essentially a continuous series of masonry arches that are placed one behind the other. A cross- section of a barrel vault shows that it is semi-cylindrical.

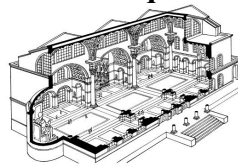
■ The second type *the groin vault* was constructed out of two intersecting barrel vaults. A barrel vault has the disadvantage of creating an equal amount of downward thrust all along the wall, and continuous thick walls are needed to support it. The thrust of a groin vault on the other hand is concentrated at the four corners at which the two vaults intersect, and so buttresses or supports can be concentrated at those points also allowing the areas between the supports to be opened up for windows. The groin vault thus has an obvious advantage of making possible a much lighter, more open interior than is possible with a barrel vault. The flexibility and practicality of the groin vault can be seen in the great hall of Trajan's Markets and other structures.



Clerestory windows in the ends of the groin vaults lighted the vast hall of the Baths of Caracalla. 10.68



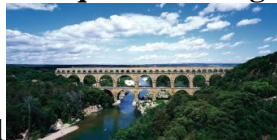
Massive groin vaults, as well as barrel vaults, were used in the basilica that was erected in the early 4<sup>th</sup> c. by Maxentius and later acquired and completed by



Constantine as the Basilica Nova 10.79

■ This basilica combined the functions of a civic meeting place and law court. Constantine added imposing masonry vaults creating a more massive structure. He refocused the power of the Late Empire in imitation of the Early Empire period and re-created that authority seen in the Basilica Nova in the Late Empire period. Unfortunately, the nave of the building has been destroyed, but three of the massive bay arches remain.

■ Roman engineers built superb aqueduct-bridges, like the famous Pont du



Gard in southern France 10.31



■ It is 880 ft long and over 160 ft high. The lower level supported the roadbed, while the upper level served as an aqueduct. With this structure, the Romans not only achieved the practical purpose of servicing the population with a water source, but also provided a vehicular and pedestrian traffic corridor over the river Gard. This was achieved by using forms of great esthetic power, as can be seen by the rhythm of the arches and by utilizing the tensile strength of concrete to create a practical and efficient structure.

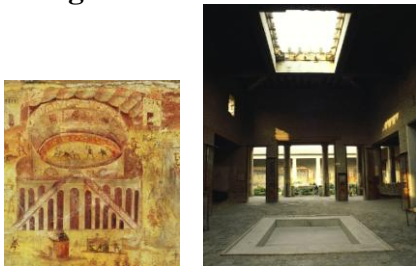
■ The Romans used repeated arch patterns with great effectiveness in other constructions, as well for example, in the Coliseum.

#### 10-34a, b Colosseum (Flavian Amphitheater), Rome, Italy, ca. 70–80 CE



■ This building was the largest arena in existence until very recent times, measuring 600 feet in length and 400 ft in width. It seated nearly fifty thousand people. The engineering feats are again impressive, the banded seats had to be supported by the structure itself, not by an underlying hill, as been the case with Greek amphitheaters.5-70

■ This construction method can be seen in the arena at Pompeii 10.12 and 10.13, The Roman builder had to literally build a mountain in order to accommodate the seating.



#### 10-13 Atrium of the House of the Vettii, Pompeii, Italy, second century BCE, rebuilt 62–79 CE.

10-12 Brawl in the Pompeii amphitheater, wall painting from House I,3,23, Pompeii, Italy, ca. 60–79 CE.

■ The Romans used their architecture to serve the Empire; each structure became a visual example of the imperial might and strength of Rome itself. The Romans were very aware of the impact of this kind of visual statement; they constructed roads to every corner of the Empire to serve the indigenous populations, but also to remind these peoples of the grandeur and power that was Rome. A Roman

**provincial city, Timgad, illustrates the Roman need to build, this was a city that became a living example of the Empire, and even reflecting the military might of the Roman Legion by its very design. The city is laid out as a Roman military camp.**

**■ The visual propaganda which Roman buildings created effectively persuaded the populations of the might of the Empire.**

**■ The building programs the Romans sponsored became efficient in servicing the Empire but also in allowing those perimeter areas definitive examples of the sheer power of the Empire.**