

Name _____

Date _____

Glossary of Terms

Select one word from the glossary above and write it beside its definition in the chart below.

aqueduct	basilica	coffer	colonnade
cross vault / groin vault	dome	drum	niche
Greek temple front motif	oculus	patriarch	portrait bust
triumphal arch	rotunda	vault	

1	A system of deep recesses into a vault or ceiling
2	A row of columns carrying an entablature or series of arches
3	A wall supporting a dome
4	Two barrel vaults crossing at right angles
5	Circular opening in a wall or dome
6	Elevated structure for carrying water
7	If an arch were rotated 360°
8	A colonnaded meeting hall
9	A Greek temple façade with pediment and columns
10	A circular interior space covered by a dome
11	Male head of the family
12	An ornamental gateway used to celebrate military triumphs
13	An arched roof
14	A recess in a wall used to hold a statue
15	Sculpted portrait of head and shoulders

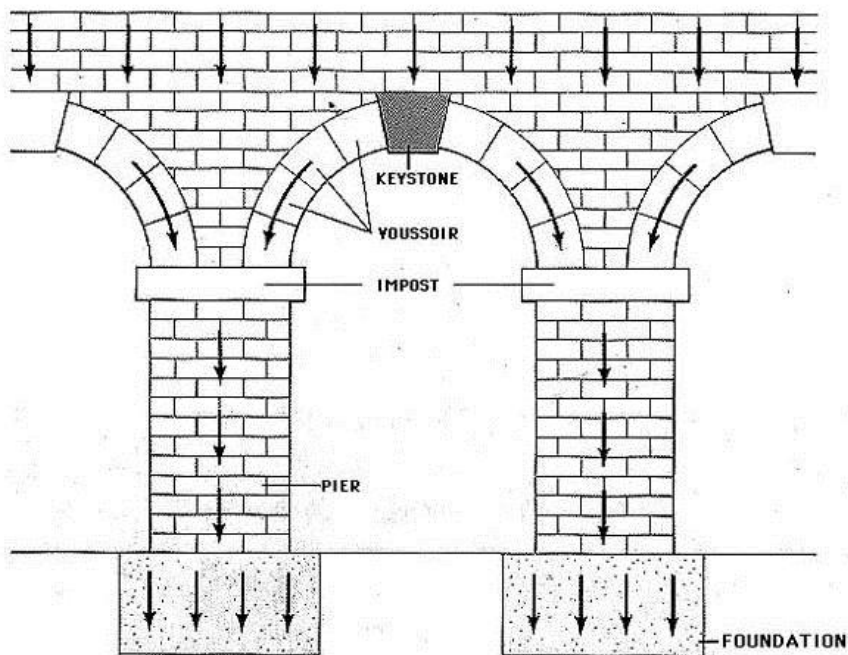
Overview:

- After Romans conquered Greece in 146 B.C., they adopted the ideals of **Greek culture** (sculpture, painting, architecture, philosophers) and blended it with the practical architecture (a system of drainage and the use of the arch) of the **Etruscans of Italy**.
- **-religious beliefs** were based on the **patriarchal society** and family, hence realistic portrait busts of ancestors
- **-architecture advanced** and increased its interior space by use of the **arch, concrete, vaults, and domes**
- **-at its height**, the Roman Empire stretched from England to Egypt and from Spain to southern Russia
- **-in the 4th century Christianity** was legalized

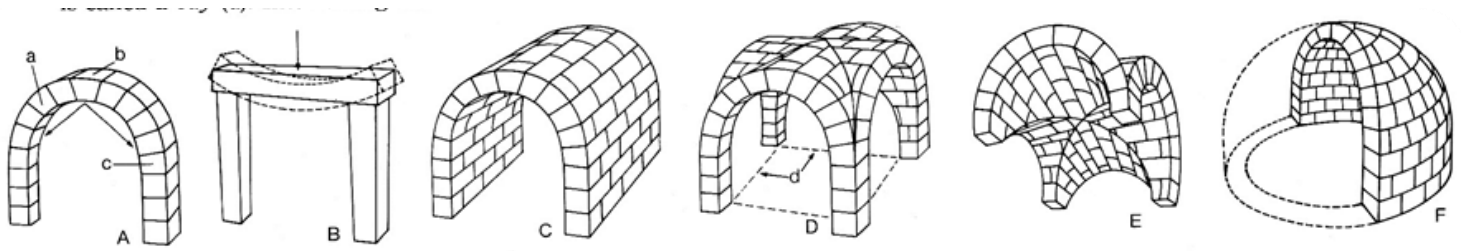
Architecture

-Secular buildings and public works were the focus: roads, bridges, aqueducts, arenas. With huge numbers of people in Rome they needed large structures

The Arch was the basis of Roman architecture that developed domes and vaults.



The **keystone** locks the **voussoir** stones of the arch in place. The downward pressure from the weight above the arch is displaced downward through the **pier** or **column**.



- A** **The Arch** is a curved structure used to span a space between two vertical elements (posts/piers, walls) Wedged-shaped blocks called voussoirs (a) give the arch its form and stability. The keystone (b) is located at the apex of the semicircle. The curve of the arch rises from the springing on either side of the opening (c). The compression of its stones is better than the tensile strength of a lintel on posts (See **post and lintel: B**).
The arch directs the weight in a lateral direction and transmits the load to the ground through the vertical elements supporting it.
- C** **Tunnel or Barrel Vault:** placed one after another, a series of arches makes a tunnel or barrel vault.
- D** **Cross Vault of Groin Vault:** Two tunnel vaults intersecting each other at right angles, create a cross vault or groin vault. The square or rectangular space that the vault defines is called a bay (d).
- E** **Underside of Cross Vault or Groin Vault:** groin lines are evident where the vaults join, hence groin vault.
- F** **Dome or Semi-dome:** Intersecting each other around a central axis, a series of arches form a dome or semi-dome

Aqueducts

Beginning in the 4th century B.C., Romans constructed huge **aqueducts** to carry water from mountain sources for distances up to 50 miles (80 km). These structures were built on continuous gradual declines to transport water by force of gravity. On the Pont du Gard aqueduct, which carried 100 gallons (378 L) of water a day for each inhabitant of the city, each large arch spanned 82 feet (24 m).

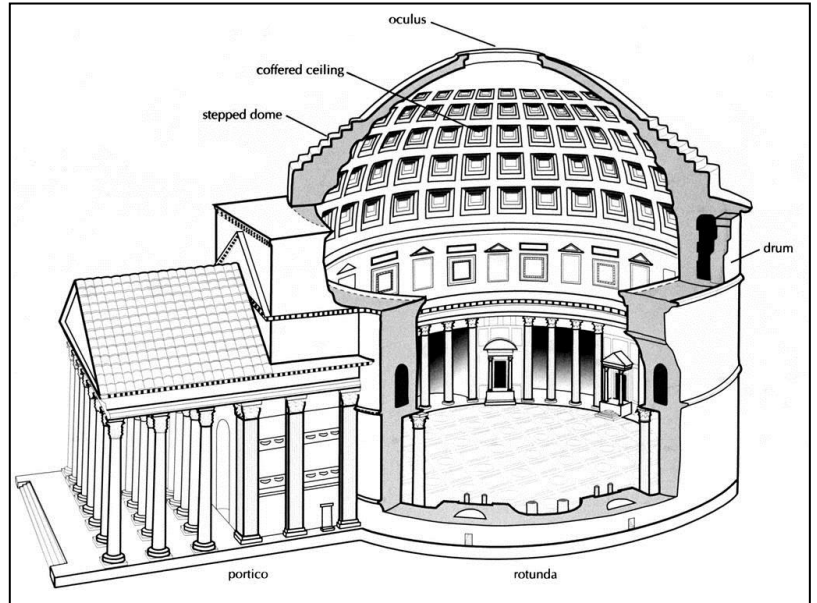


Pont du Gard, Nimes, 1st century B.C., France.

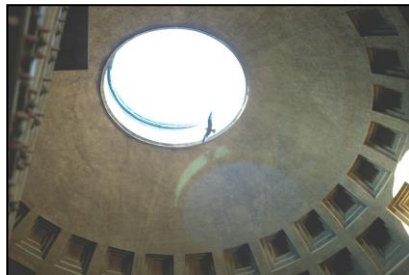
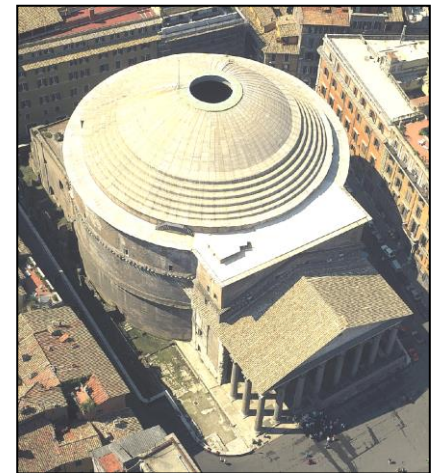


The Pantheon, Rome A.D. 118-125

- a temple to all the gods
- a colonnade of Corinthian order columns support a Greek style pediment (**temple front motif**)
- the steps that once led up to the entry porch are gone; we were meant to look up at the building

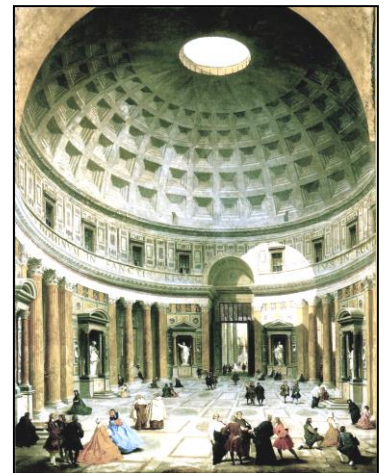


- the **rotunda** is a three-tiered cylinder (or **drum**) with a dome
- The pantheon uses a pleasing combination of circles and squares
- walls are 20 feet thick
- the recesses in ceiling called **coffers** lighten the load of the poured concrete dome



- single "eye" or **oculus** in top of dome provides light source. If it rains, floor raised slightly in centre causes water to drain off to the sides

-inside are niches, or recesses, in the wall that may have contained statues dedicated to the Roman gods of the heavens: Sol (sun), Luna (moon) and gods of five known planets - Mercury, Venus, Mars, Jupiter and Saturn. Above these were the twelve signs of the zodiac. The dome represented the heavens.



The Colosseum,
Rome, A.D. 72-
80

-a large
amphitheater or
arena for sporting
or entertainment
events

-four vaulted
stories
constructed of
stone, concrete and brick

-each story makes use of different column types: Doric, Ionic,
Corinthian

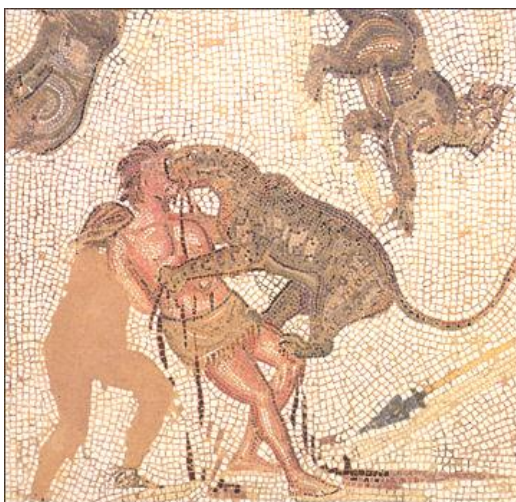
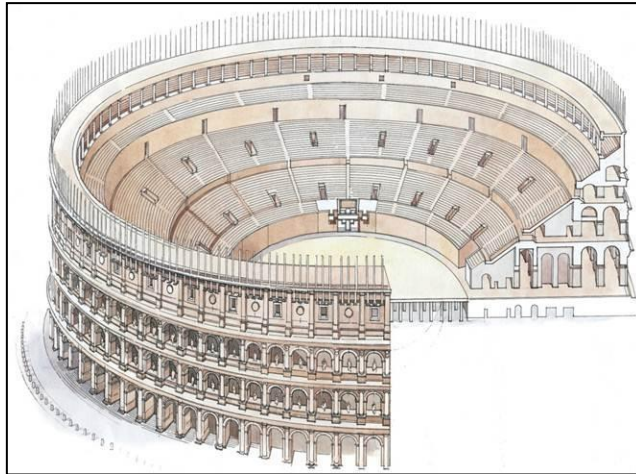
-enough seats to accommodate 50,000 people

-on the ground level are 80 arched openings for spectators to enter
and exit quickly

-canvas awnings protected spectators from the sun and rain

-entertainment ranged from chariot races, fights of wild animals,
brutal combats between gladiators, lions battling convicted criminals
and Christians

-the wooden floor was covered with sand to absorb the blood
-there were cells underneath the floor that held animals, people,
and equipment



The Arch of Constantine, A.D. 312

-Romans loved celebrations and often marked their successful military campaigns by building *triumphal arches*

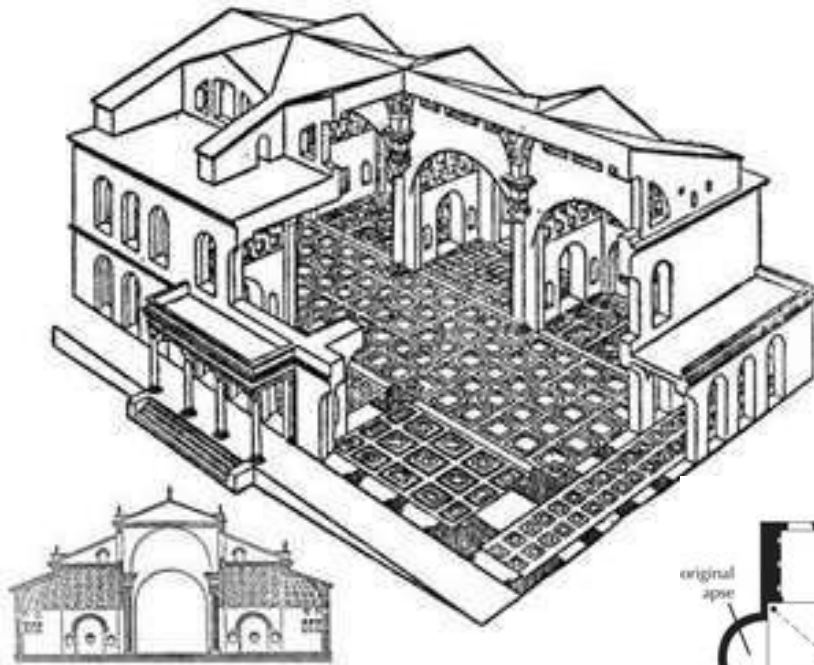


triumphal arches

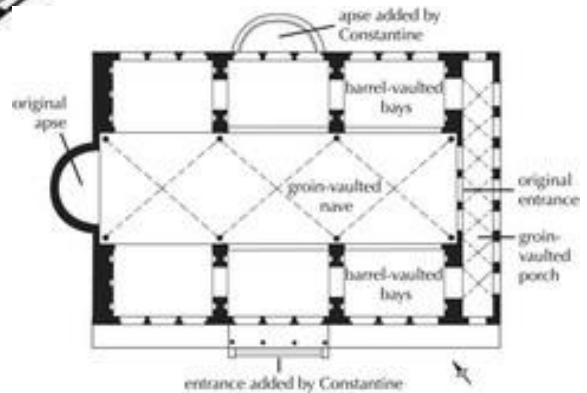
- built in honour of Constantine's victory over Maxentius
- the victors and victims of Rome were paraded through the portals
- fine balancing of verticals and horizontals; of solid and open areas; of plain and decorated surfaces
- relief sculpture depicted important events
- Corinthian columns are detached

The Basilica

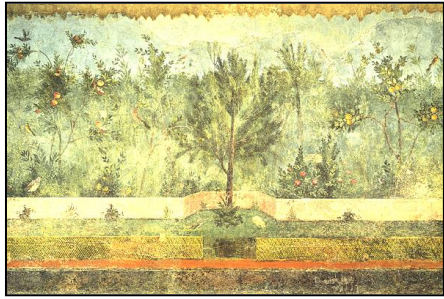
-spacious rectangular buildings called basilicas were designed as public meeting halls, and were made to hold large numbers of people
-slender columns divided the interior space into a long, wide centre aisle called a nave, and two narrower side aisles. The roof over the center aisle was higher than the roof over the side aisles.



This allowed clerestory windows to let sunlight in.
-one or more apses (semicircular areas) were at the end of the nave
-later the basilica would develop into Christian churches



Painting



- wealthy Roman families used walls or parts of walls for murals
- Villas were painted with realistic still lifes and landscapes
- murals depicted make-believe windows with elaborate views of fantasy vistas

Sculpture



-Romans preferred realism over idealism. They honoured emperors, noblemen, or their ancestors

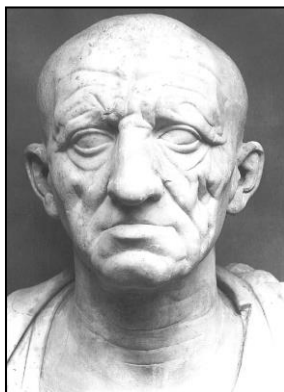
Portrait Statue of a Republican carrying two Ancestor Busts, end of first century, B.C. - indicates the Roman preoccupation with ancestor worship

-they made wax masks of a deceased family member to carry during the funeral. After, it would be displayed in a small shrine.



Stone and marble were the more durable and preferred medium for portraits.

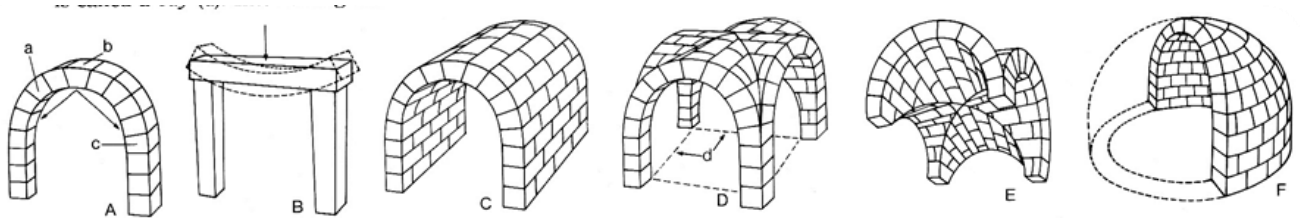
-the effect is a more realistic appearance and individualistic expression



General Questions (18 marks for content + 2 marks for writing style = **20 marks**)

Answer each question using FULL sentences. Remember to restate the question in your answer.

1. Label each illustration with the correct term: post and lintel, the arch, barrel vault, cross or groin vault, dome or semi-dome (5)



2. Which two cultures did Romans adopt? Explain how each culture was an influence. (2)
3. How were Romans able to construct architectural structures with huge interior spaces? (2)
4. How do Roman and Greek sculpture differ? (2)
5. Compare the Parthenon to the Pantheon. (4)
6. Why were there no windows in the Pantheon? (1)
7. What was the function of the triumphal arch? (1)
8. Name one contemporary building that borrows any aspects of Greek or Roman architecture. (1)