

Lecture #1: Introduction to Architecture

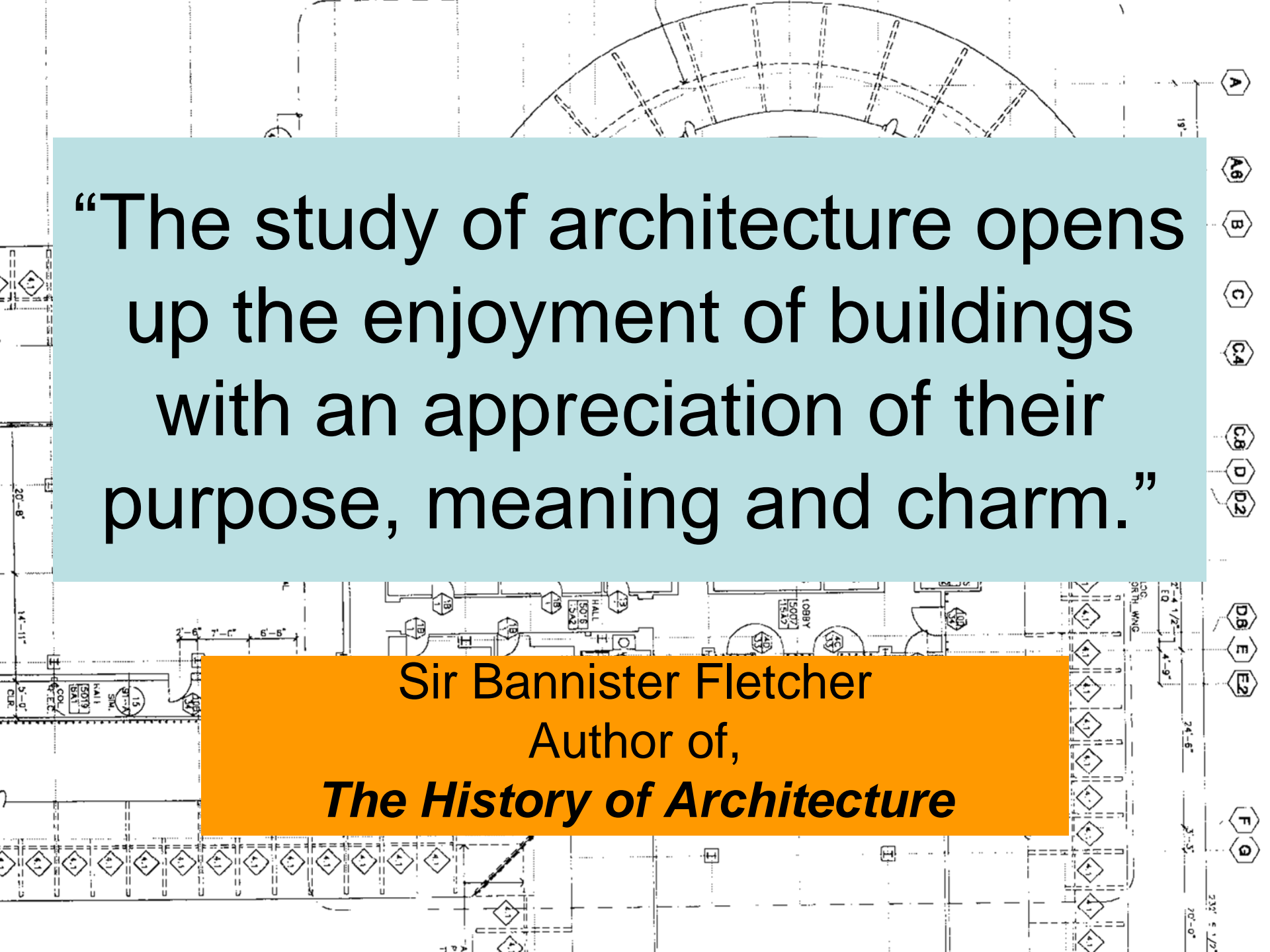
*From Antiquity through
The Gothic Period*

The background of the slide is an impressionistic painting of a field of flowers. The top half shows a dense field of pink and purple blossoms, possibly cherry blossoms, with soft, visible brushstrokes. The bottom half shows a similar field of flowers, but with more varied colors including hints of orange and red, suggesting a different variety or perhaps a different lighting. The overall style is soft and painterly, with a focus on color and light rather than sharp detail.

“Once A Week Art”

*An Introduction to Art History
for Christian Students*

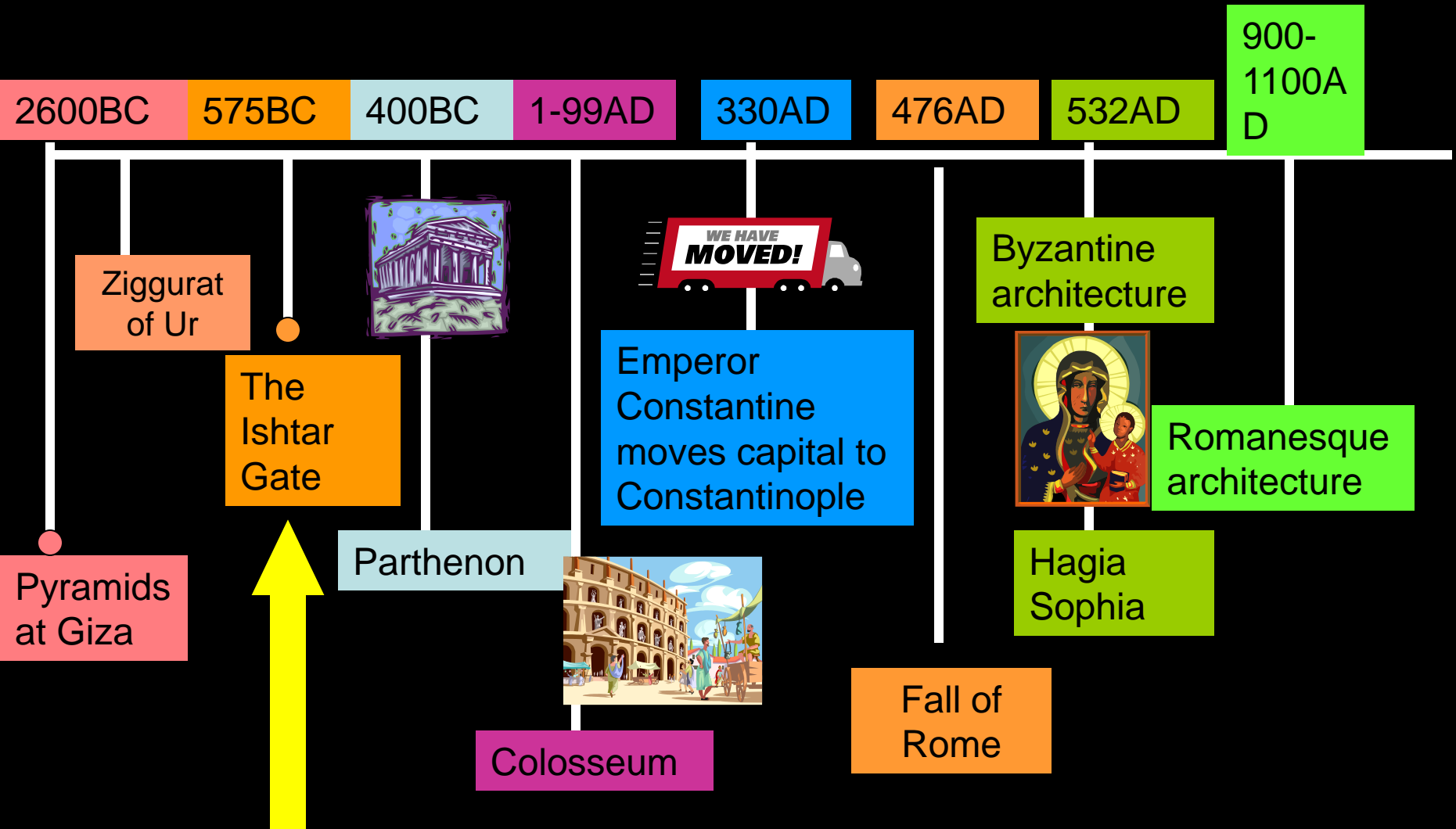
Presented by:
L. Kay Mash Aragona
Calvary Lutheran School
Dallas, Texas

The background is a detailed architectural drawing, likely a floor plan or section of a building. It features various geometric shapes, lines, and labels. On the right side, there is a vertical column of labels: A, A6, B, C, C4, C8, D, D2, D6, E, E2, F, G. The drawing includes a large semi-circular structure at the top, a central rectangular area with internal divisions, and a series of diamond-shaped elements at the bottom. Dimensions and other technical notations are scattered throughout the drawing.

“The study of architecture opens up the enjoyment of buildings with an appreciation of their purpose, meaning and charm.”

Sir Bannister Fletcher
Author of,
The History of Architecture

Ancient Architecture Timeline



What is *architecture*?

Architecture is the style or character of a building.

Art Deco style
architecture

Dallas, Texas
Fair Park



Great Pyramid at Giza

2.3 million
limestone blocks
carried from
quarries down the
Nile



Tallest manmade
structure in the
world for over
3800 years

Took 14-20
years to build





Ziggurats of Mesopotamia

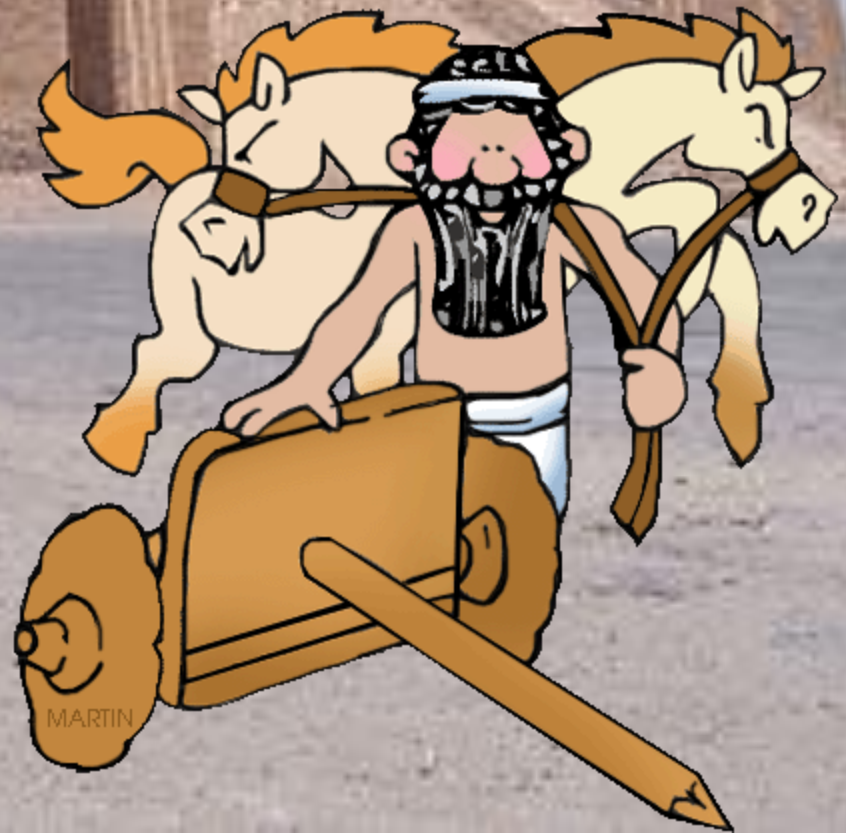


Step-pyramids
built in
Mesopotamia
(today's Iraq
and Iran) by
Sumerians,
Assyrians, and
Babylonians

Great Ziggurat of Ur



Built
around
2100BC

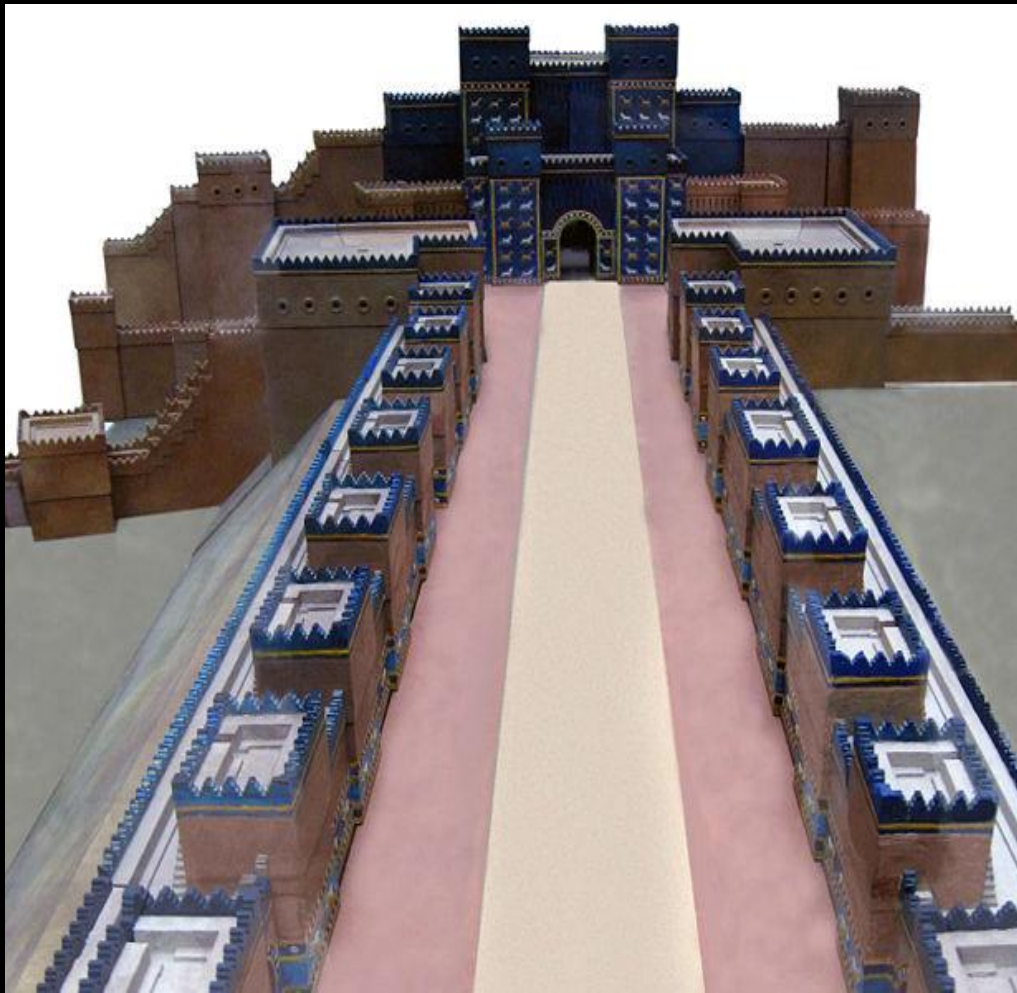


Ancient Babylonian Architecture: *The Ishtar Gate*



- The Ishtar Gate was constructed in 575BC by King Nebuchadnezzar II
- Constructed of blue glazed tiles
- The gate has been reconstructed at the Pergamon Museum in Berlin, Germany from original artifacts

The Ishtar Gate (575BC): one of the entrances to the ancient city of Babylon



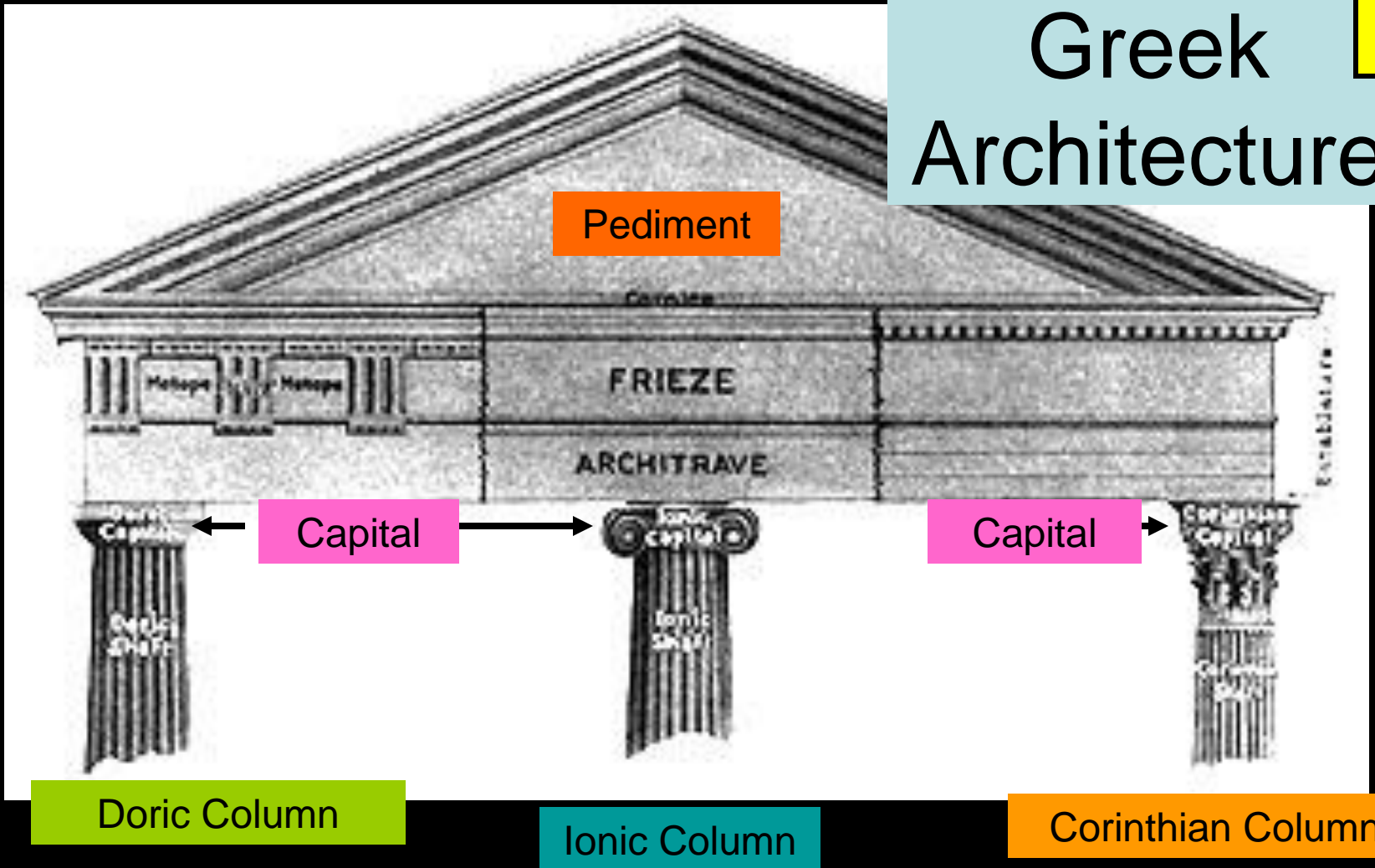
Dedicated to the
Babylonian
goddess, Ishtar

The Ancient Greeks



- Known for their temples and open-air theatres
- Columns determined temple style
- Roof tiles replaced thatched roof around 700-650BC (better fire protection)
- Architect was treated as a craftsman

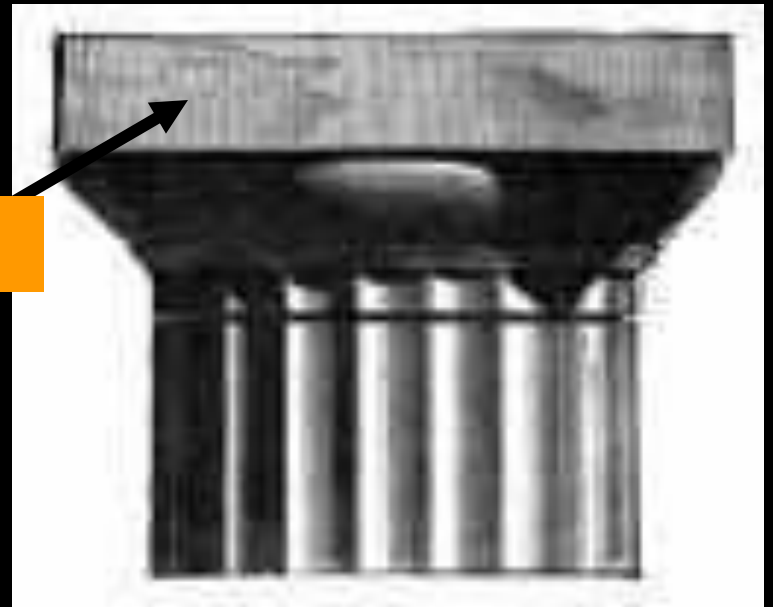
Ancient Greek Architecture



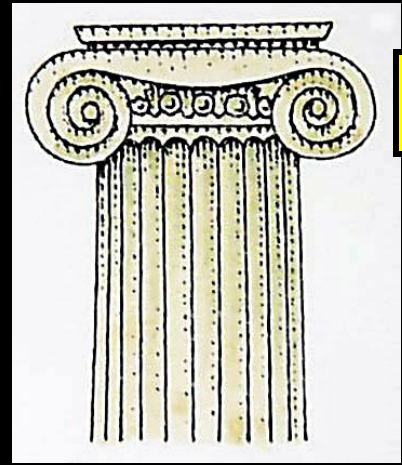
Doric Column



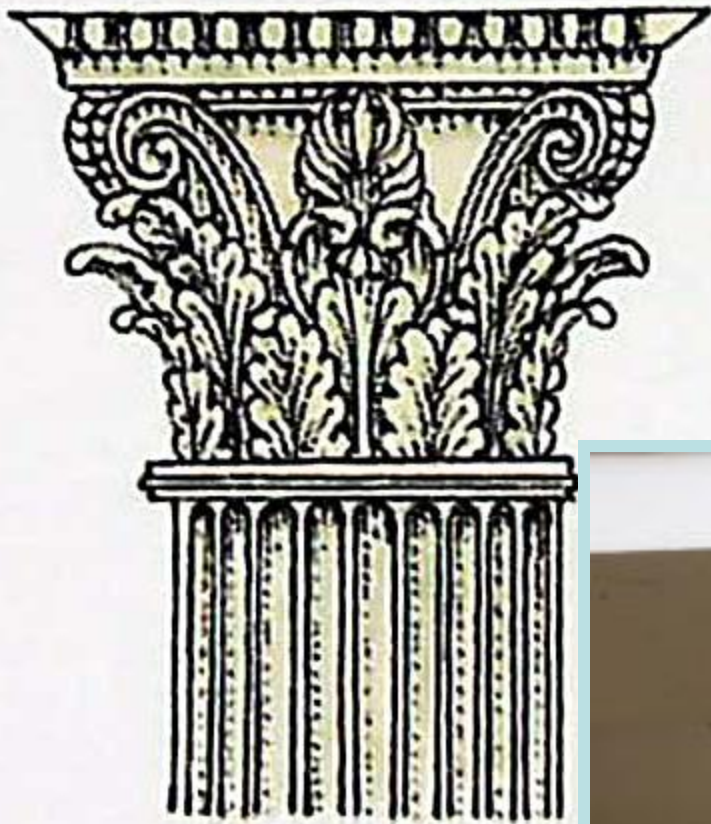
capital



Ionic Capital



Corinthian Column



Temple to
the Greek
goddess,
Athena

pediment



frieze

architrave

Doric
columns

The Parthenon,
Athens, Greece

Greek Architecture:
5th century BC

The life-sized
sculptures which once
decorated the
pediment can be
found in the British
Museum in London.

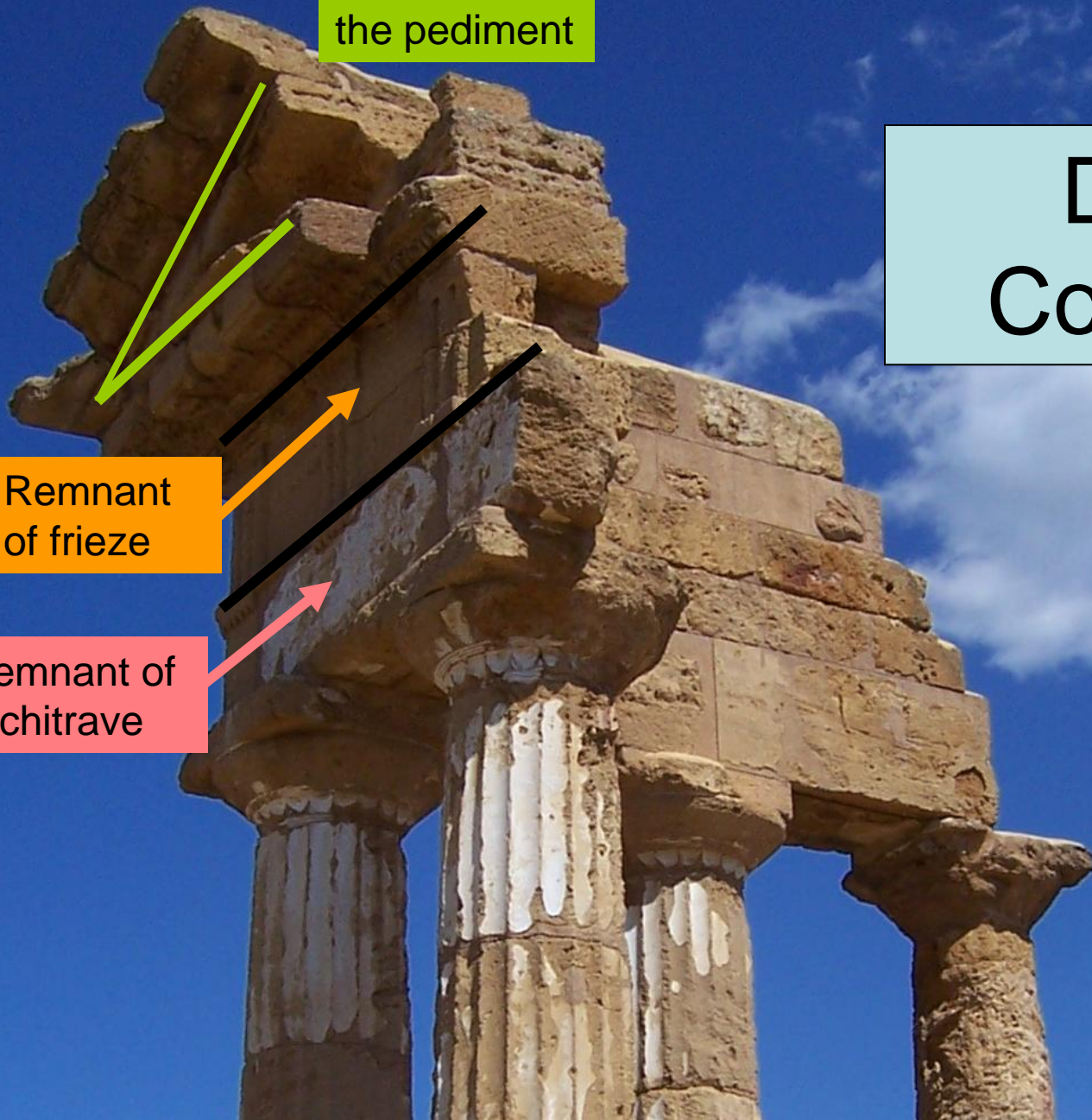


Doric Columns

Remnant of
the pediment

Remnant
of frieze

Remnant of
architrave





*Greek temple
with Doric
columns*



Which type are these columns?





Which type are these columns?



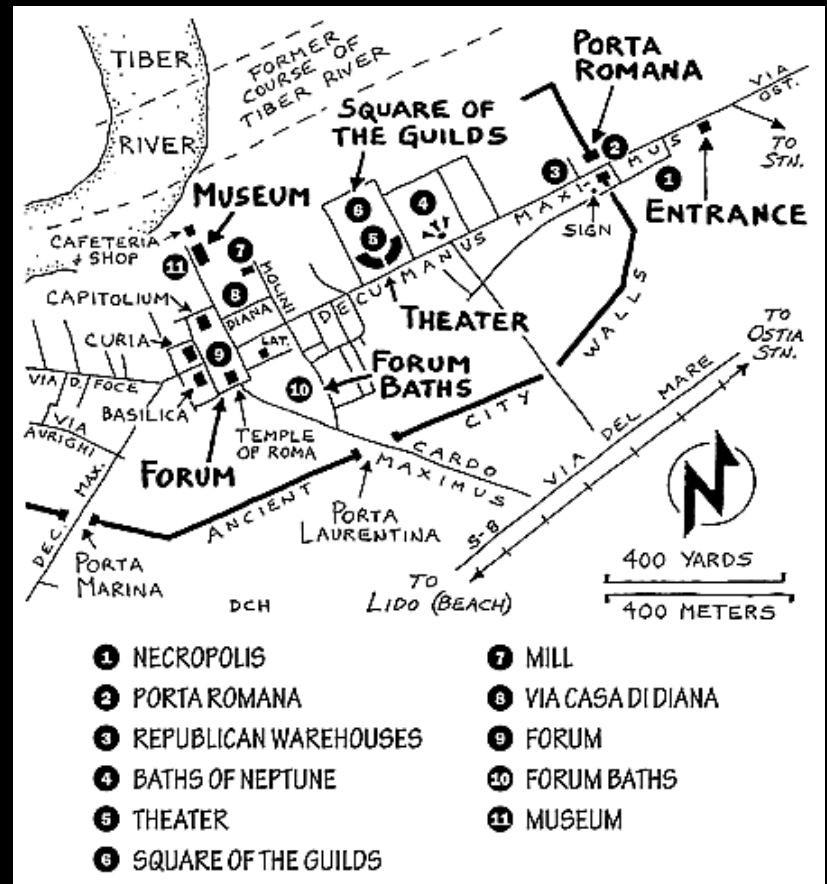
Ionic columns



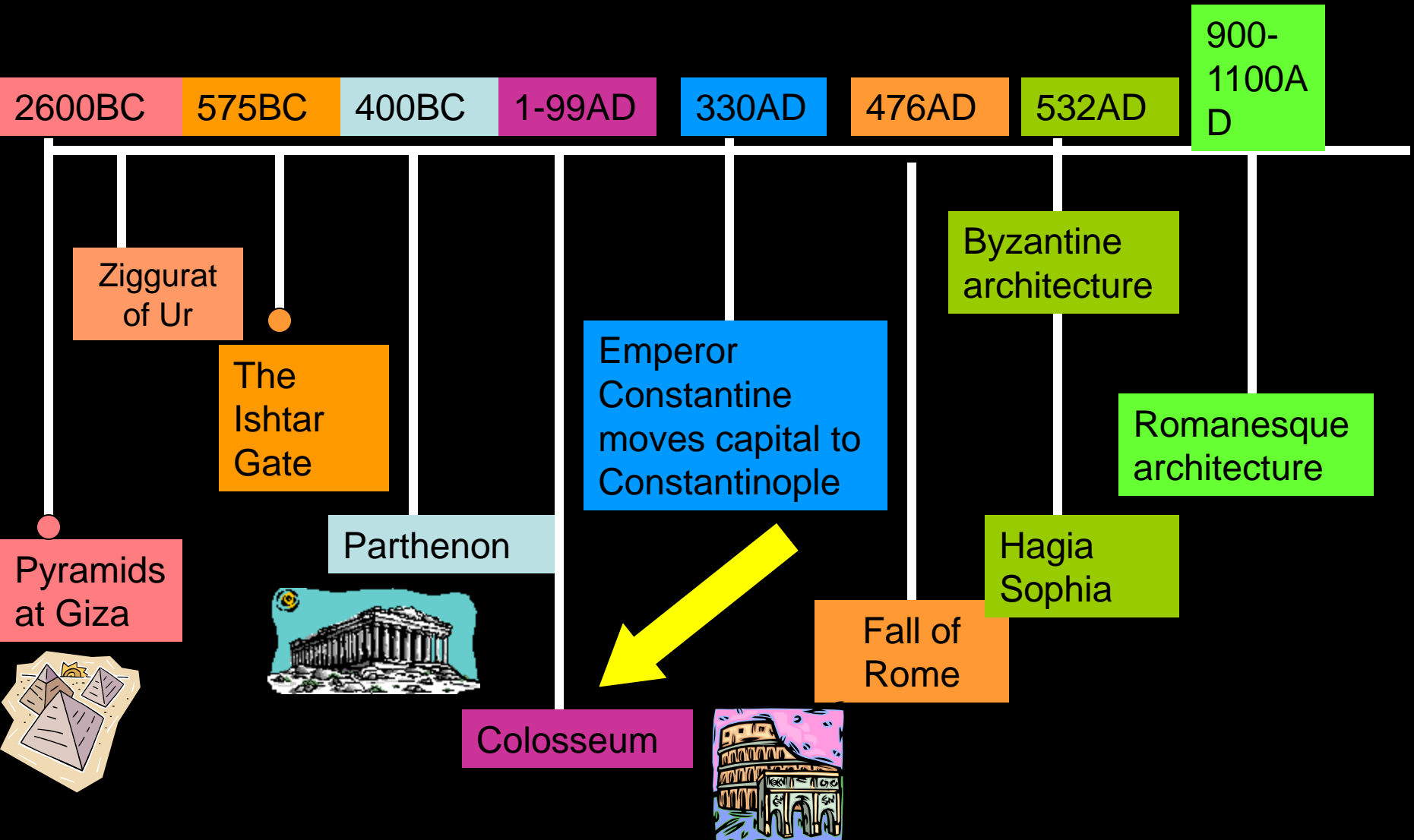
Ostia Antica



- Roman town
- Seaport – founded 620 BC as naval base
- Later commercial center and Rome's food pantry



Ancient Architecture Timeline

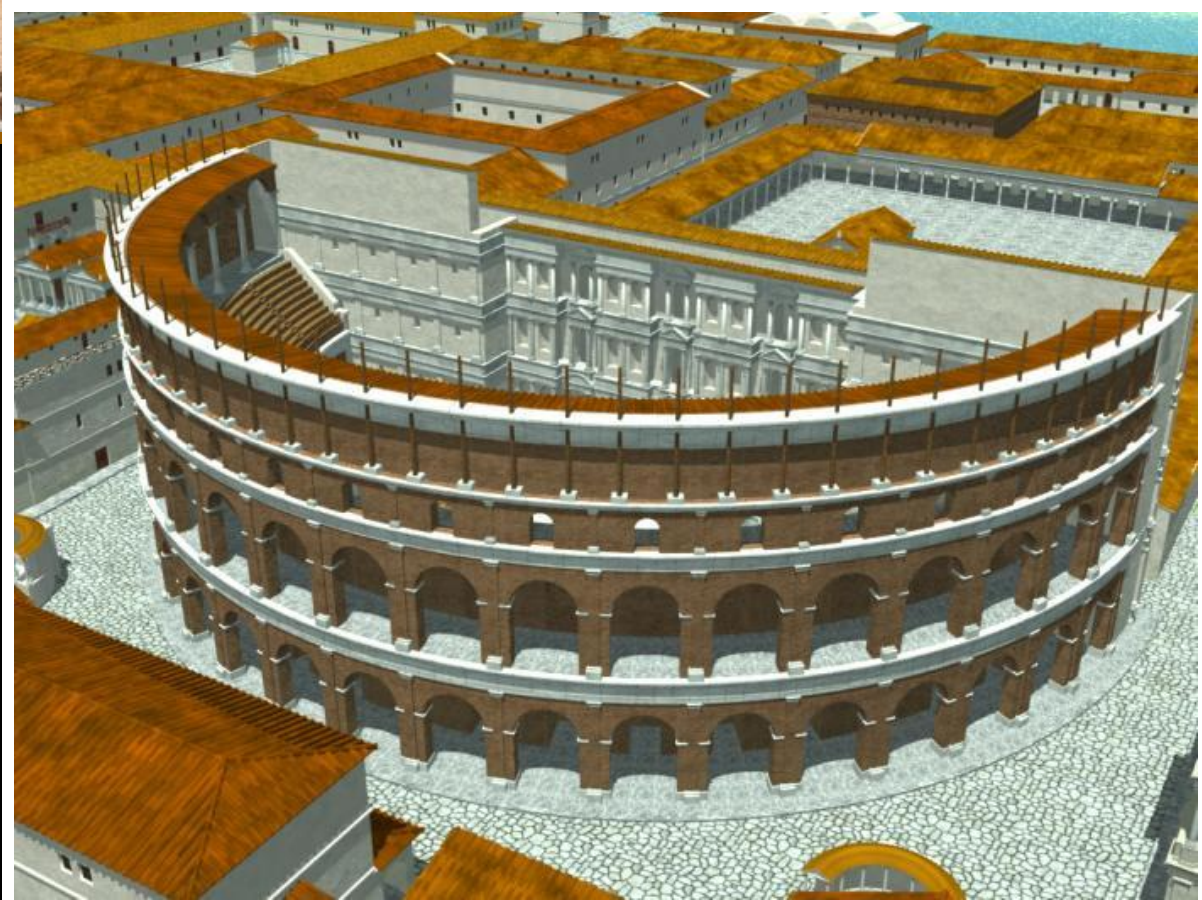




Ostia Antica: *Theatre*

Pronounced **os-tia an-teek-a**

Built 196 AD



- Originally built as a temple in 432BC, then rebuilt in the 2nd century AD
- Used as a church since the 7th century; the artist, Raphael, is buried here
- Inspired Brunelleschi's 42-meter dome in Florence (1436), the first sizeable dome to be constructed in Western Europe since Late Antiquity

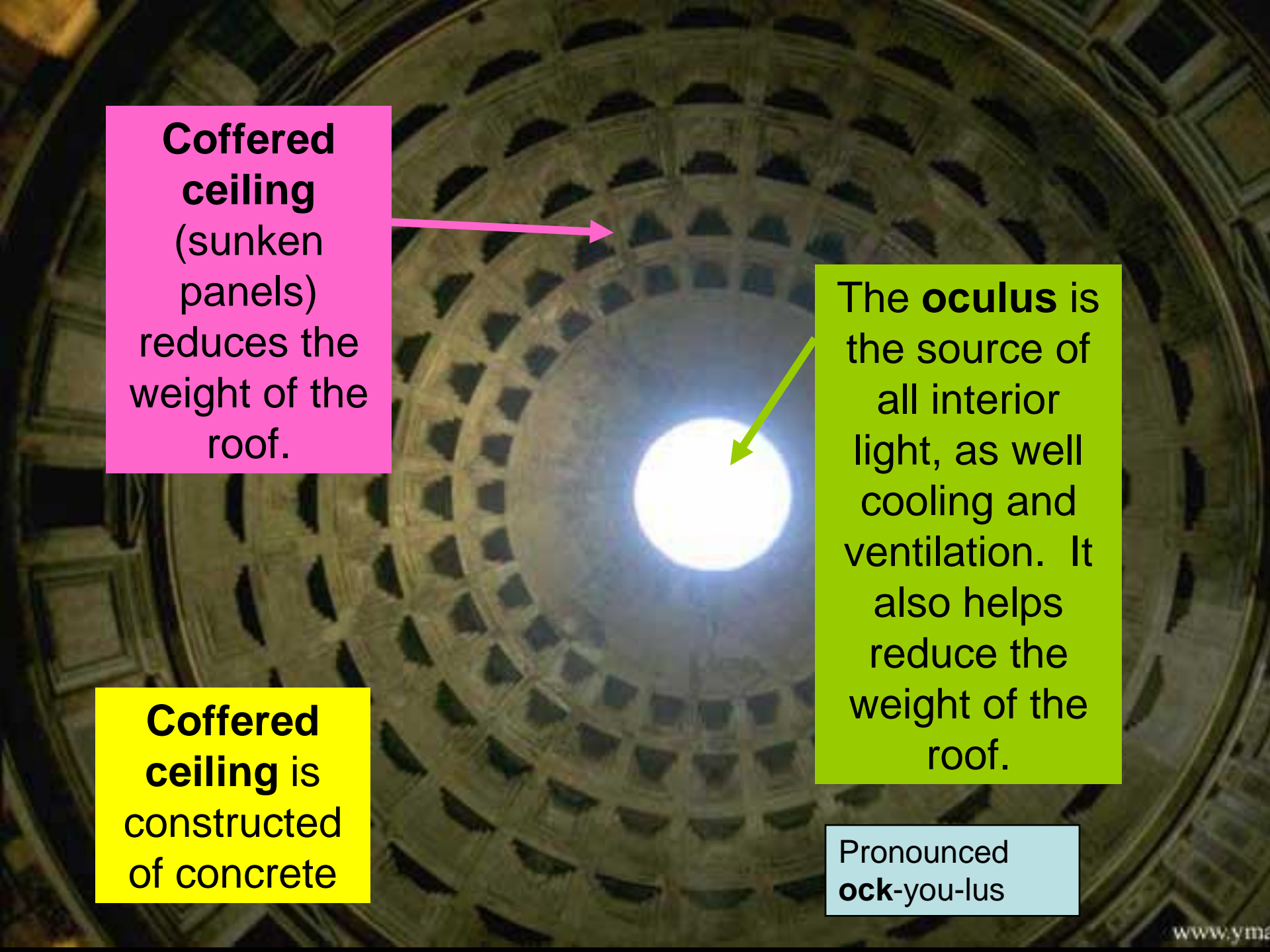
The Pantheon in Rome



Pantheon ceiling



Still the
largest
unreinforced
concrete
dome in the
world.



Coffered ceiling
(sunken panels)
reduces the weight of the roof.

Coffered ceiling is constructed of concrete

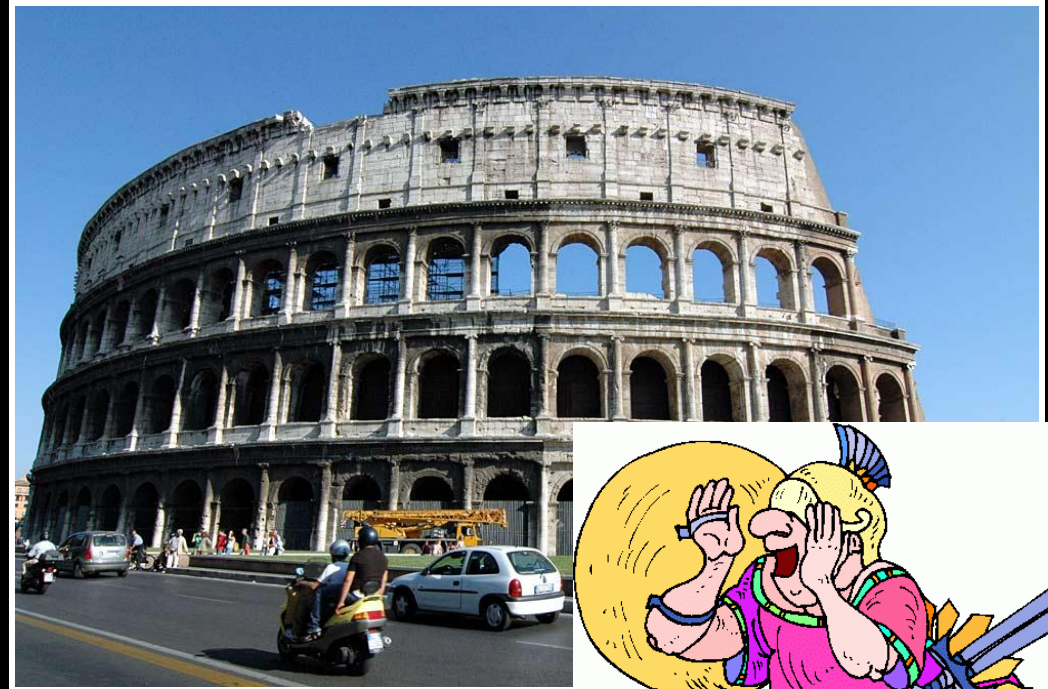
The **oculus** is the source of all interior light, as well cooling and ventilation. It also helps reduce the weight of the roof.

Pronounced
ock-you-lus

Roman Architecture – The Colosseum in Rome, Italy

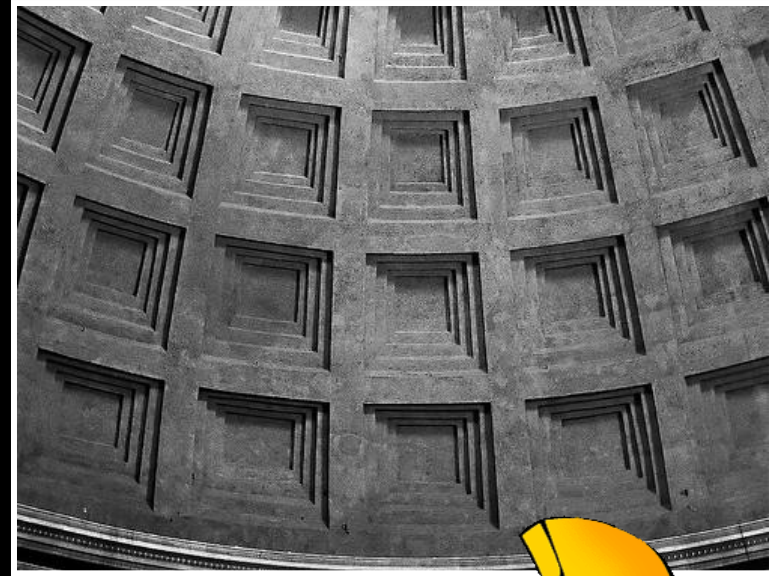


- Based upon Greek architecture
- Roman brick covered with marble
- Built under Roman emperors, Vespasian A& Titus
- 1-99AD



- Artificial building material consisting of an **aggregate** (gravel, crushed bricks, etc.), a **binding agent** such as *pozzolona* (volcano dust) or gypsum, & **water**
- Romans shaped concrete into arches & vaults, foundations, patios, fireproof ceilings, and harbor structures
- Romans covered concrete with brick or lava stone to make it more attractive

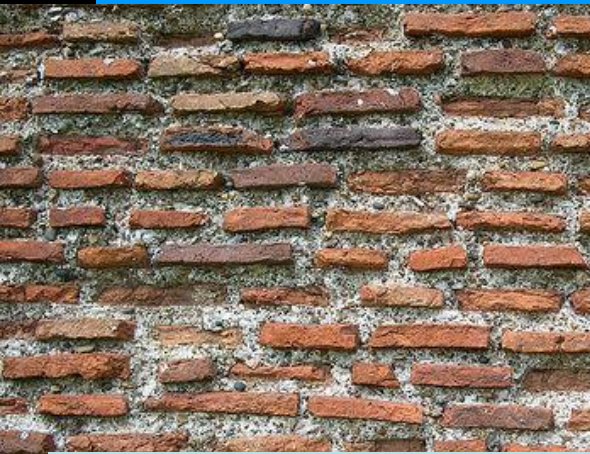
Roman concrete



Pantheon
ceiling:
concrete



Roman Building Materials: Roman Brick

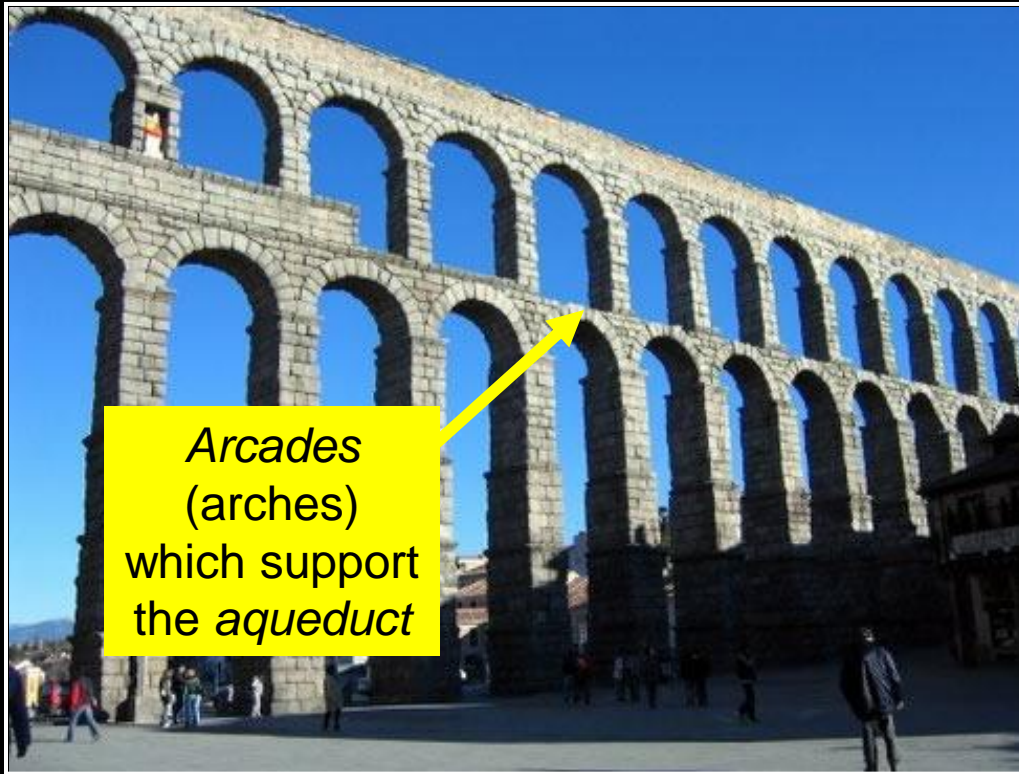


Romans used bricks in many buildings & took their knowledge of brick-making to other lands they conquered, including Britain.



The Roman Aqueducts

- sophisticated system used to carry water from outlying areas to cities
- Most aqueducts were underground
- Some were above ground and were supported by arcades (arches)



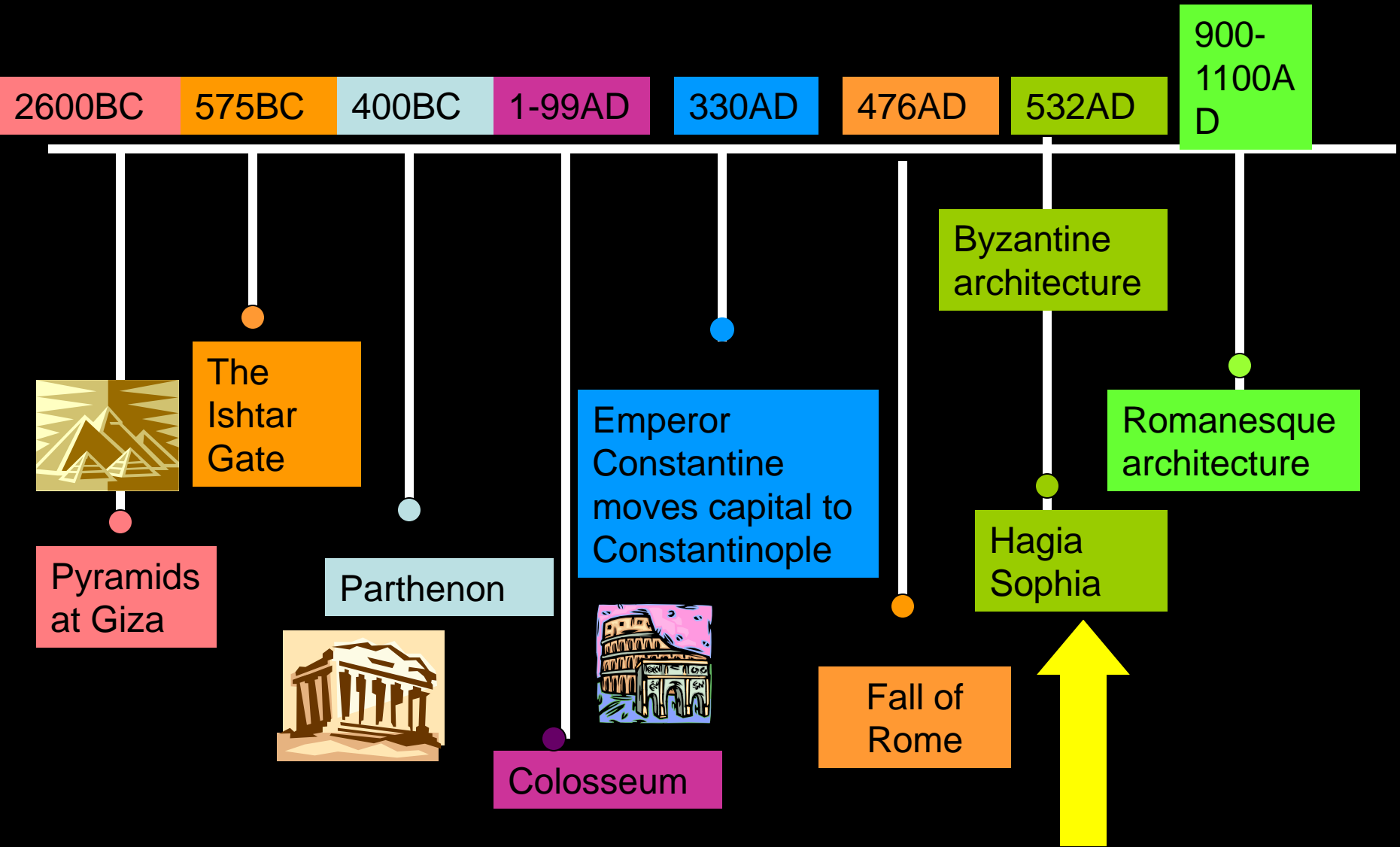
Arcades
(arches)
which support
the *aqueduct*

*Roman Aqueduct,
Segovia, Spain*

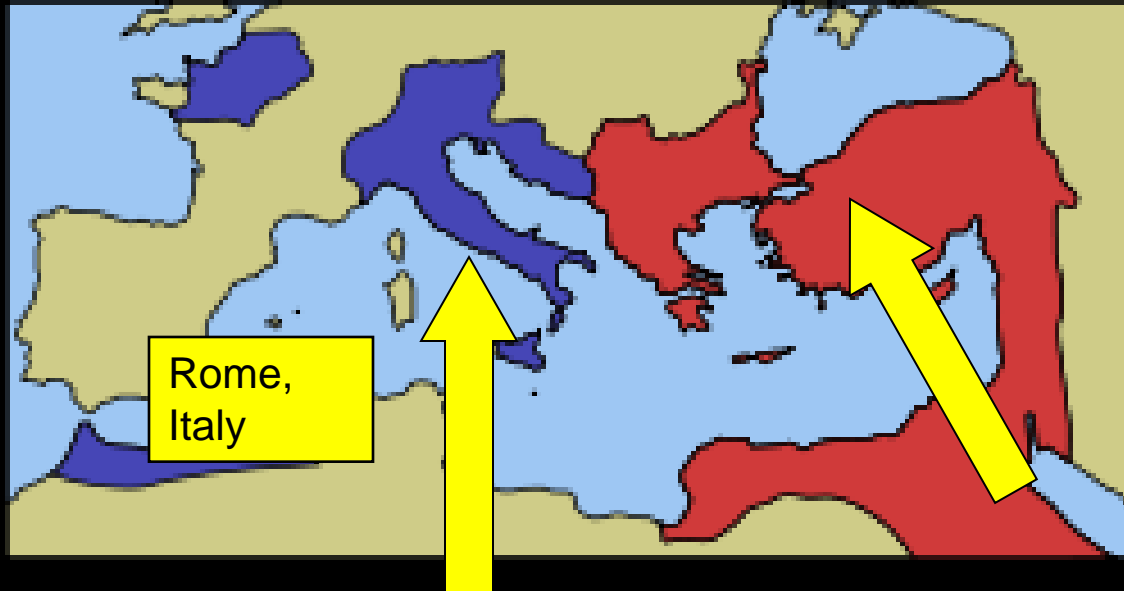


Inside the aqueduct

Ancient Architecture Timeline



Over time, the Roman Empire was divided into 2 parts: West and East

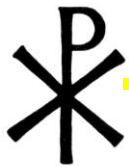


- Western part spoke Latin
- Not as wealthy as the East
- Capital located in Rome & other Italian cities

- Eastern part spoke Greek
- Byzantine architecture

Constantine, a pagan, had a vision of a Chi-Rho in the sky shortly before he entered a battle with Emperor Maxentius to gain control of the Roman Empire.

“In this sign, you will conquer” is what Constantine said Jesus told him in a dream.



Chi-Rho: Christian symbol with 1st 2 Greek letters of word, Christ

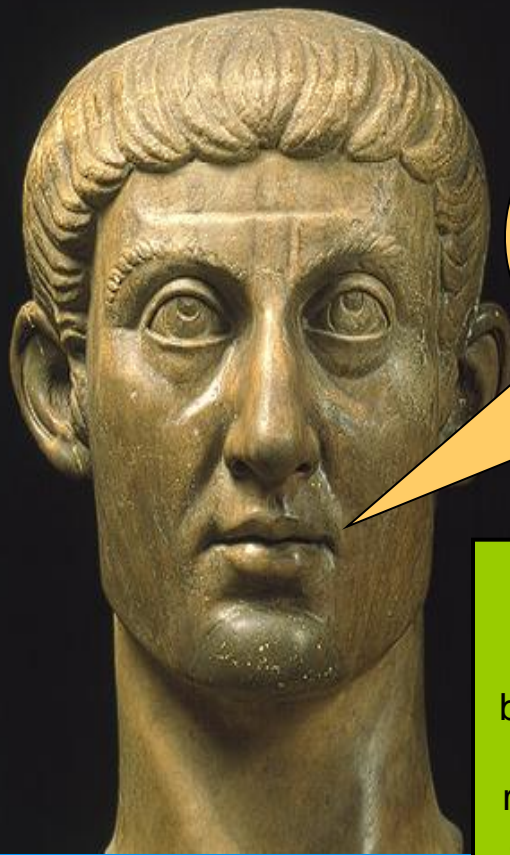


After he won the battle, Emperor Constantine became a Christian.



Constantine the Great
Peter Paul Rubens

The Emperor Constantine moved the capital of the Roman Empire from Rome to Byzantium, (renamed Constantinople) 😊 in the year 330AD.



Bust of Emperor Constantine

Bye-bye
Rome!
Hello
Byzantium!

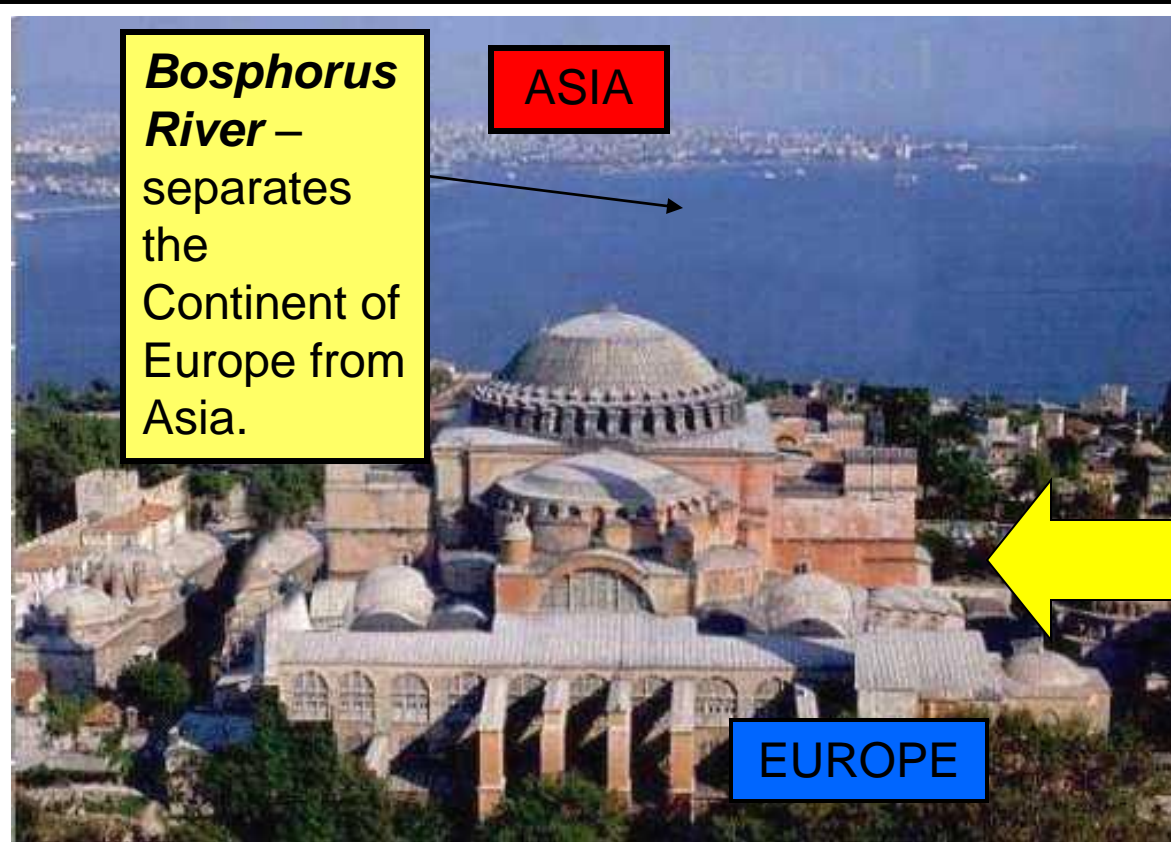
Emperor Constantine called together Christian bishops in 325AD in Nicaea to settle religious arguments about the nature of Jesus. The Nicene Creed resulted.

Emperor Constantine, a convert to Christianity, built many churches, including the 1st St. Peter's in Rome.

**WE HAVE
MOVED!**



In Constantinople, the *Hagia Sophia*, built in 532-537AD, was the finest example of Byzantine architecture and remained the world's largest Christian church for a thousand years. ☺



Bosphorus River – separates the Continent of Europe from Asia.

ASIA

EUROPE

Hagia Sophia, as it would have appeared in the time of Emperor Constantine. This example of Byzantine architecture was built in only 5 years.

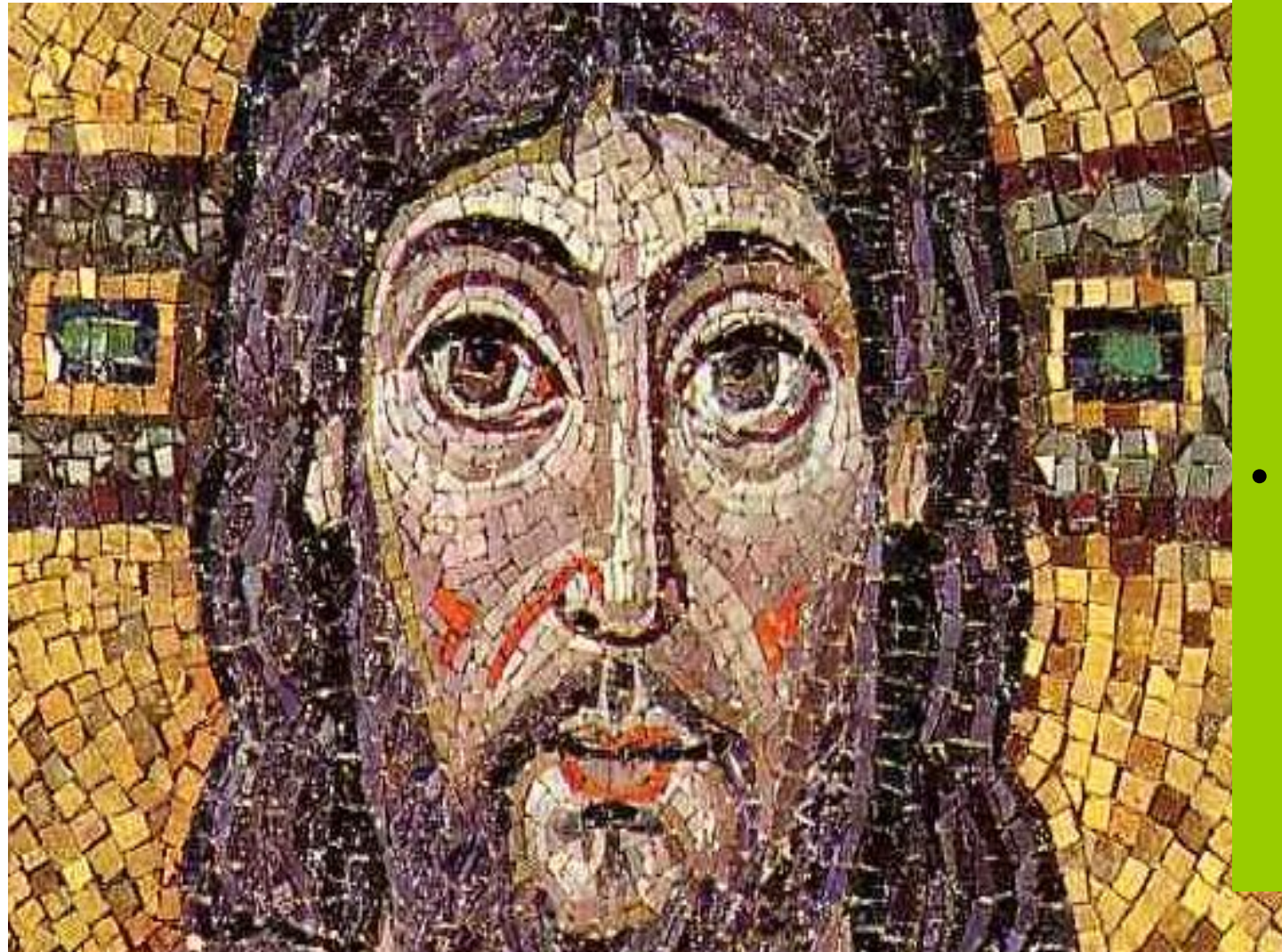
- Mosaics instead of carvings
- Multiple domes
- The name, ***Hagia Sophia***, means “Wisdom of God”

Byzantine Art & Architecture



Mosaics in Chora Church,
Istanbul, Turkey

Byzantine Mosaics



- Mosaics are pictures made up of small pieces of colored stone or glass
- Ravenna, Italy - known for its Byzantine mosaics



After attacks by Germanic forces,
Rome falls in 474AD.

The Fall of Constantinople - 1453



50,000 Islamic troops of the Ottoman Empire battled 8,500 Byzantine Christians. When the Ottoman leader, Sultan Mehmed II, entered the city, he prayed at Hagia Sophia, then ordered it be converted to an Islamic mosque.



After Constantinople was conquered by the Muslims...

- the bells, altar and iconostasis were removed
- the Christian mosaics were plastered over
- the minarets were added
- The name of Constantinople was changed to Istanbul

Hagia Sophia was converted to an Islamic mosque



Minarets
added by the
Muslims



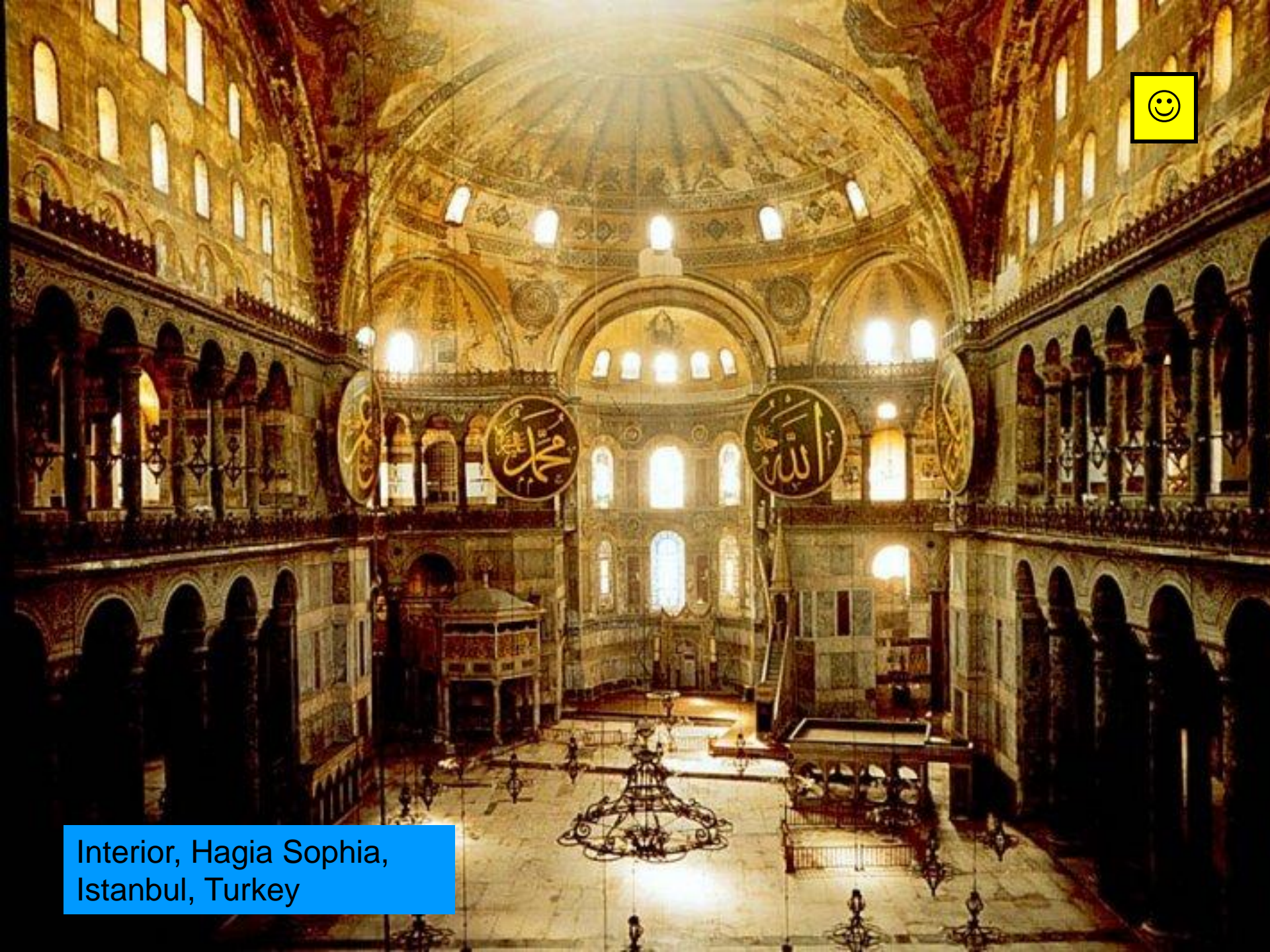
Hagia Sophia

Largest Christian church in the world for nearly 1,000 years



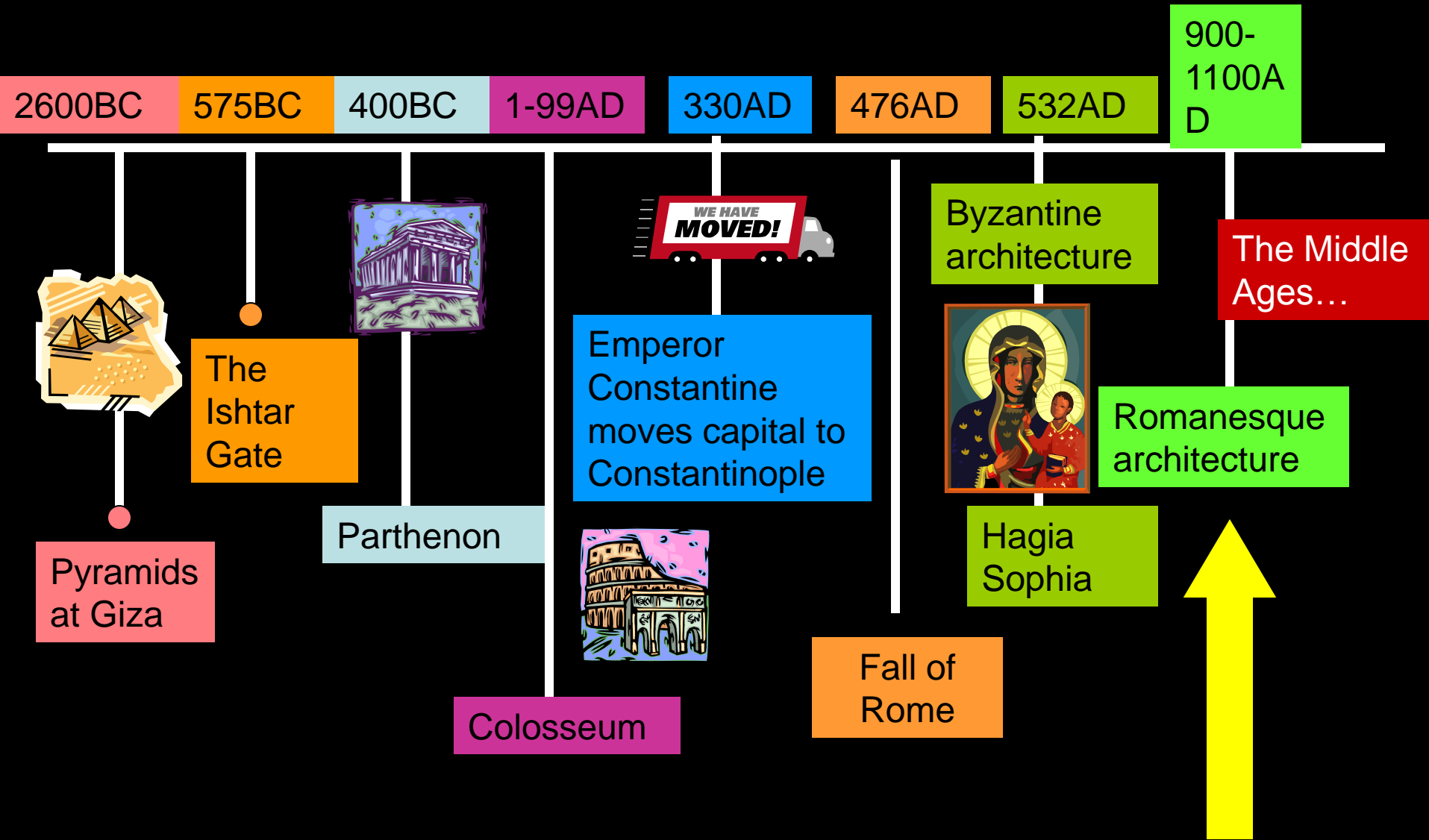
In 1453, Constantinople was captured by the Ottoman Turks and Sultan Mehmed II ordered the church to be converted to a mosque

Muslims removed the bells, the iconostasis, and the altar, and added plywood panels with Arabic verses.



Interior, Hagia Sophia,
Istanbul, Turkey

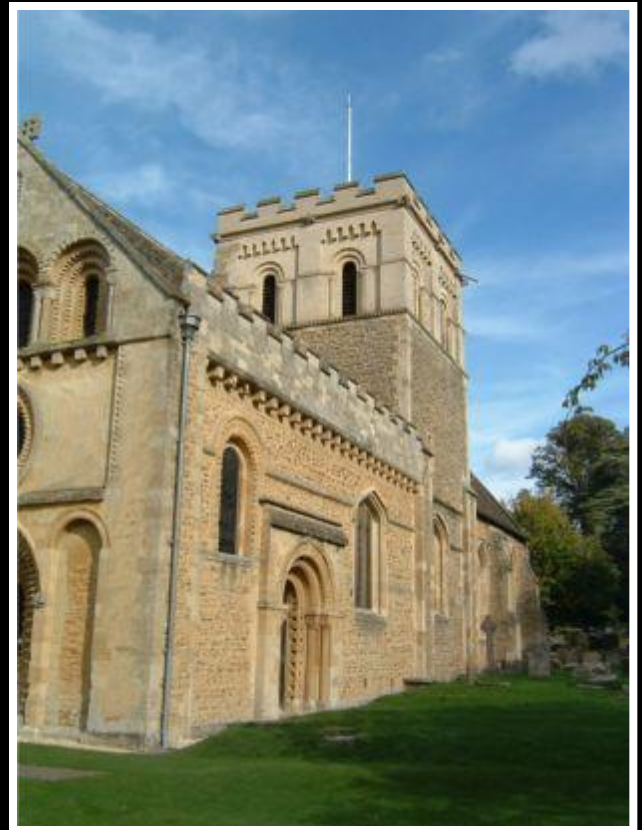
Ancient Architecture Timeline



- *Romanesque* means “descended from Roman”
- Romanesque architecture in England is called “Norman” architecture
- Architecture of medieval Europe (10th-12th centuries)
- Rounded arches
- Evolved into Gothic architecture in the 12th century



Features of Romanesque Architecture

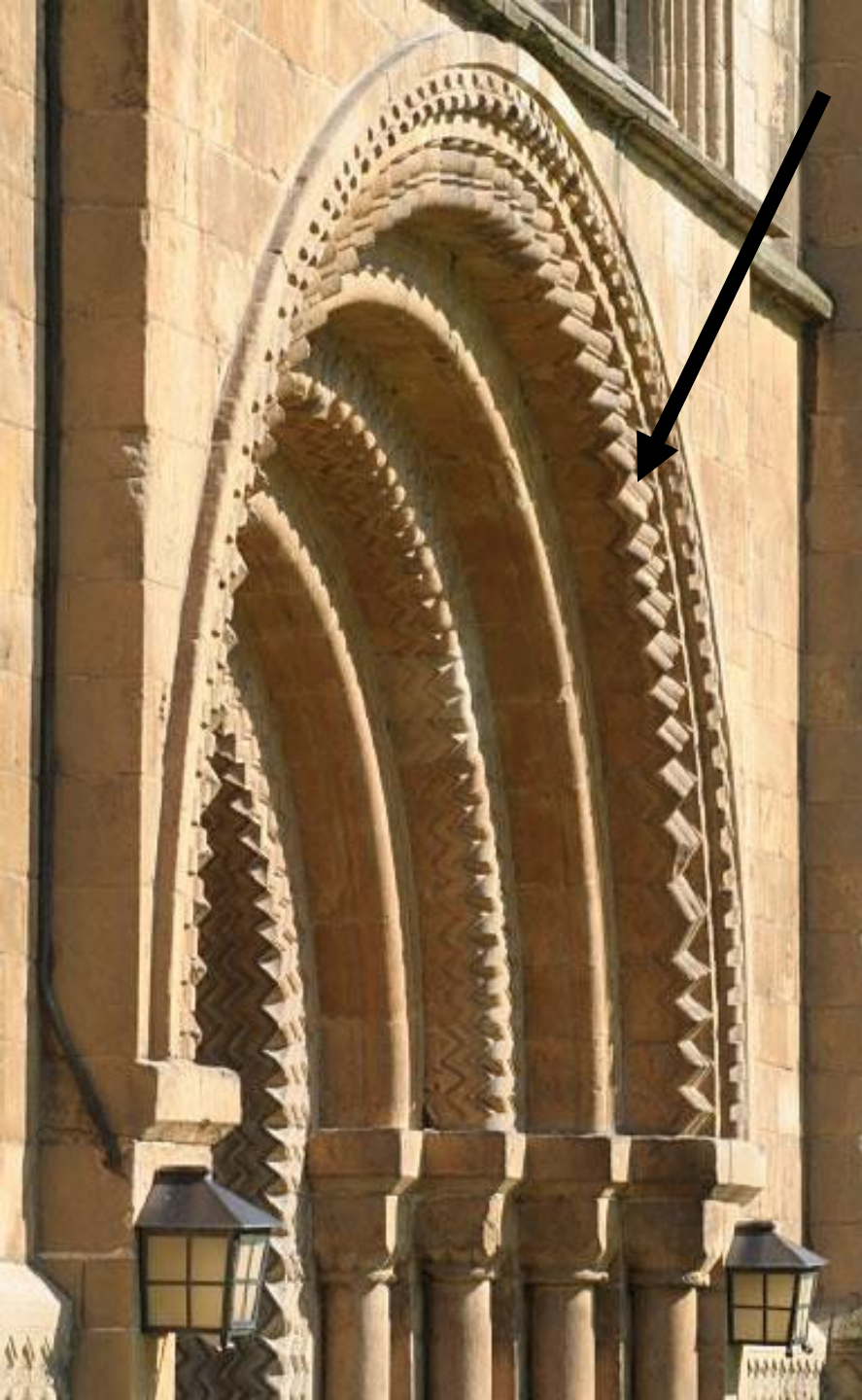


Romanesque Architecture



- Thick walls
- Rounded arches
- *Lombard band*
- Barrel vaults
- Pointed arch or ribbed vault





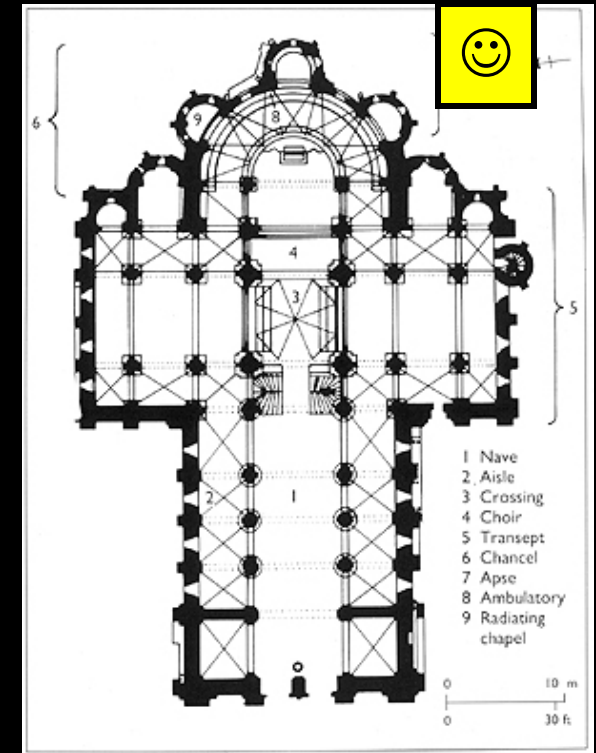
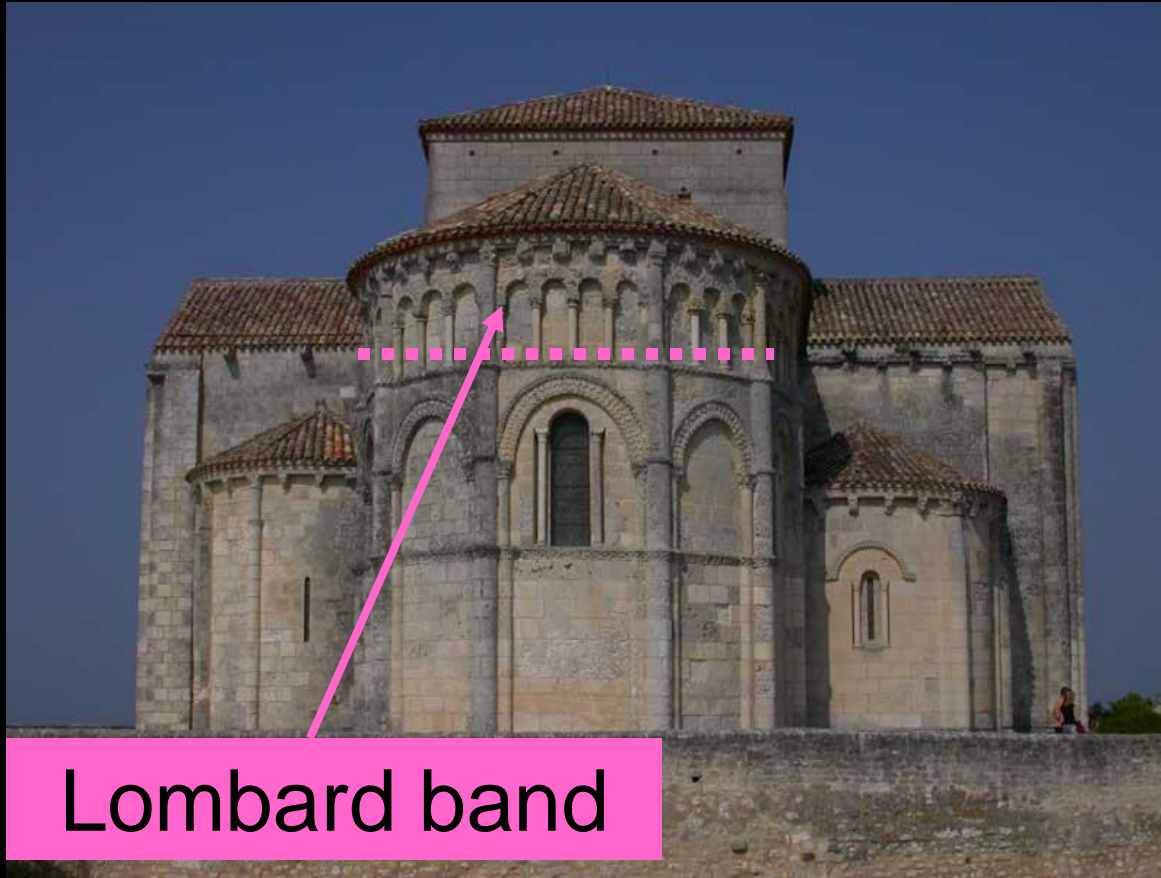
Chevron moulding



A zig-zag moulding used
in Romanesque (Norman)
architecture



Romanesque architecture



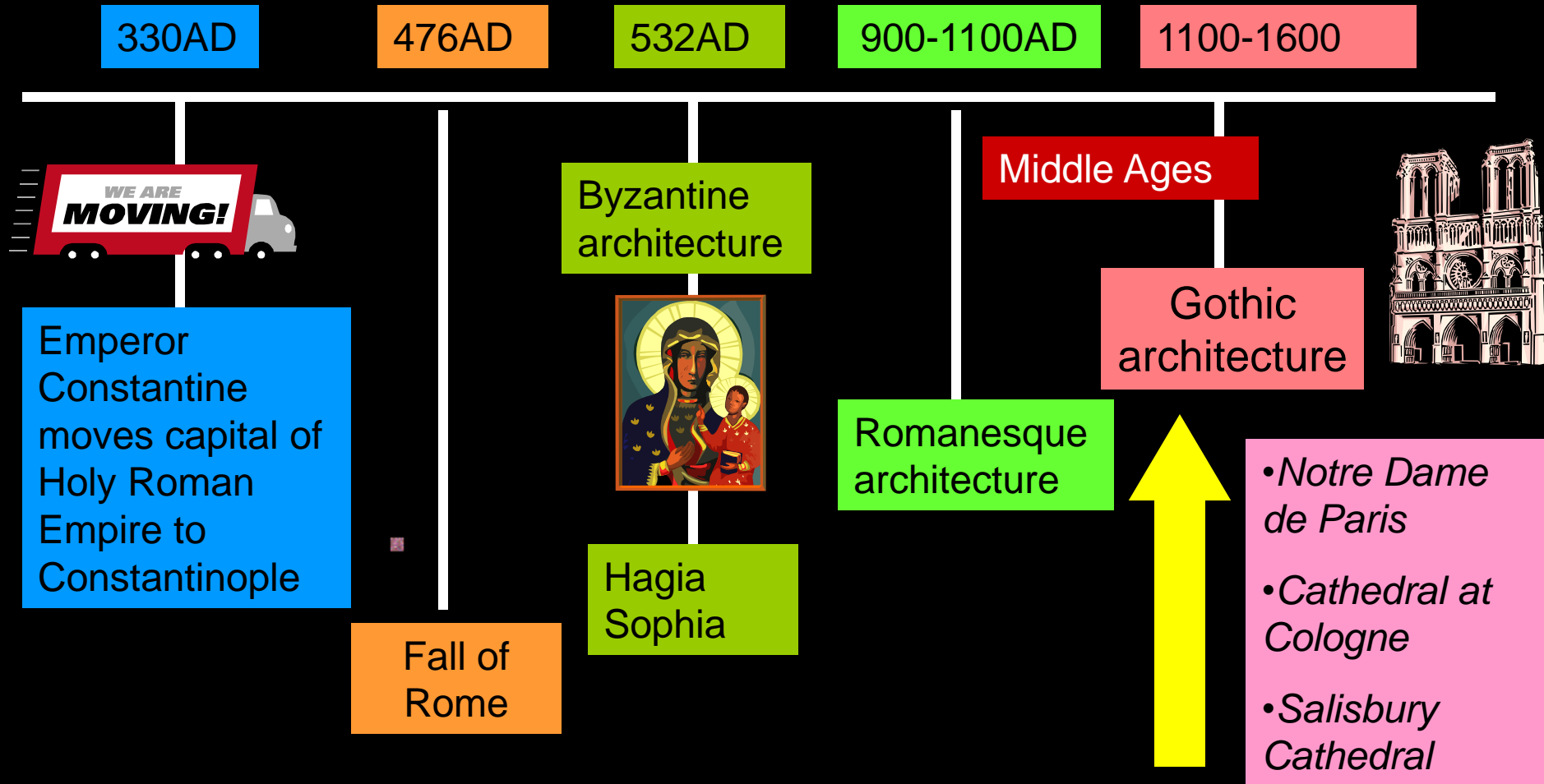
Romanesque church floorplan – simple compared to Gothic churches

Romanesque Architecture

Lombard band:
decorative arched
border on the exterior
of Romanesque
buildings



Architecture Timeline



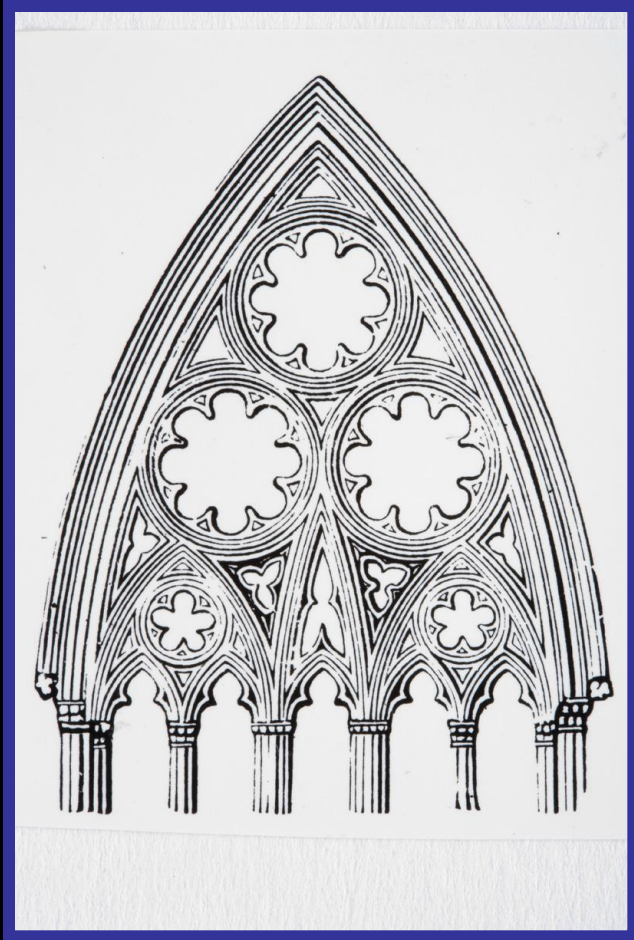
- Rounded arches (Romanesque) replaced with pointed arches (Gothic)
- Towns competed to create tallest churches
- Some churches collapsed, killing many
- Stained glass windows weakened walls
- Flying buttresses were added to support very high walls

Gothic Architecture



Flying buttresses

The Gothic Window

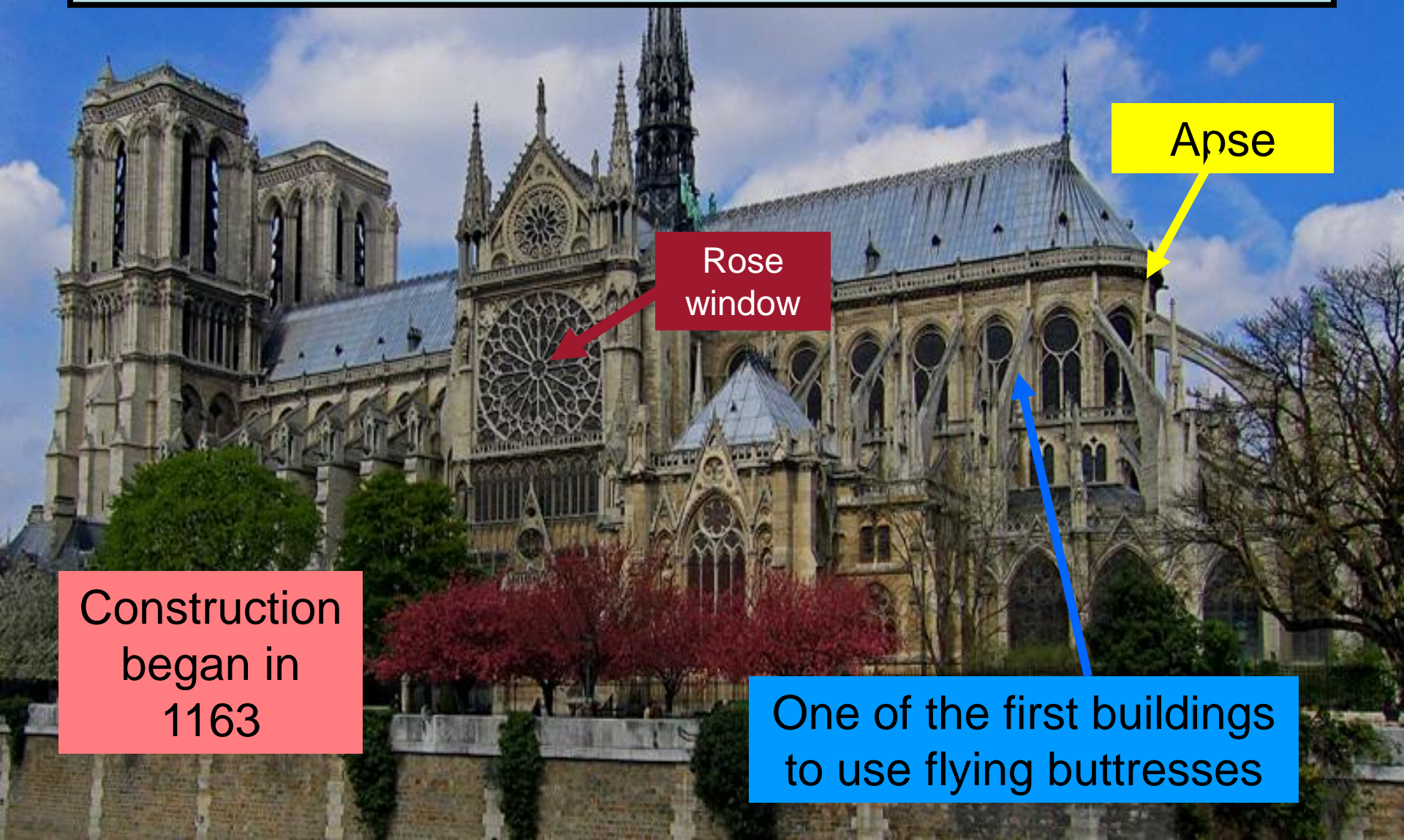


Pointed
arch



Gothic
ceiling

Notre Dame de Paris



Anse

Rose window

Construction
began in
1163

One of the first buildings
to use flying buttresses

Cathedral library
houses original
copy of Magna
Carta

404 feet tall
spire

Salisbury Cathedral



Gothic cathedral
with tallest spire in
England

Unique church because
unlike most Gothic
churches of its day, it
was built to completion
in one generation,
(1220-1258) – without
additions

Do I *have* to
sign this thing?

King
John

Magna
Carta 1215

Cathedral at Cologne, Germany

- Another example of Gothic architecture
- Foundation for the church was laid in the 1240's
- Church wasn't complete until over 600 years later

