

ARCHITECTURE IN EUROPE (Part 2)



ARCHITECTURE FROM THE FALL OF THE ROMAN EMPIRE TO THE CONTEMPORARY AGE

STUDENT' WORKSHEET

ARCHITECTURE IN EUROPE. PART 2

Architecture from the fall of the Roman Empire to the contemporary age

INFORMATION ABOUT ACTIVITIES:

 Individual activity

 Work in pairs

 Work in groups of three

 Work in groups of four

Architecture in the Byzantine Empire



In 395 A.D., the Roman Emperor Theodosius divided the Roman Empire into two parts; the Western Roman Empire (capital in Rome and which fell into the hands of the barbarian invaders quickly), and the Eastern Roman Empire (the Byzantine Empire, with Constantinople (Byzantium and now Istanbul) as its capital, that flourished until its fall to the Ottomans in 1453).

Artistically, the Byzantines had Roman influence but adding many aspects of Greek and eastern cultures. Very important is its architecture, based on worship-oriented buildings, and its mosaics, giving a magnificence and sumptuousness to them.

The architecture begins to follow the Roman tradition, but eventually, more and more Orientalized forms were incorporated. Large domes, semi-circular arch, vaults and columns (especially Corinthian style) began to be used. A distinguishing feature was the use of the **cymatium** (inverted pyramid-shaped piece, above the column capitals). Externally, Byzantine churches are austere (built with stones and bricks), but they presented a great decorative richness into their interior, full of mosaics. Churches with a Greek or Byzantine cross had parts of equal length.



Basilic of Saint Nectareous (Aegina)

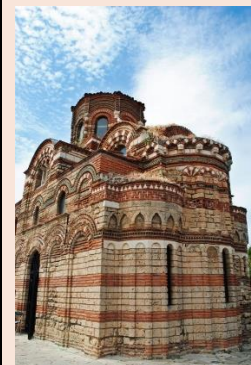


by [fusion-of-horizons](https://search.creativecommons.org/photos/2e8f01f4-a450-4180-8638-48e1495409a7)
<https://search.creativecommons.org/photos/2e8f01f4-a450-4180-8638-48e1495409a7>



Inside a byzantine church

by [fusion-of-horizons](https://search.creativecommons.org/photos/b77cb4d1-06e6-4f6b-9d39-33e5fdb4df96)
<https://search.creativecommons.org/photos/b77cb4d1-06e6-4f6b-9d39-33e5fdb4df96>



Church of Christ Pantocrator, (Nessebar, Bulgari)

by [vic_burton](https://search.creativecommons.org/photos/56bfc55d-df03-4fe9-8c2e-589f64707583)
<https://search.creativecommons.org/photos/56bfc55d-df03-4fe9-8c2e-589f64707583>



Basilic of Sain Marcos (Venice)
 (Byzantine Gothic) (Floor plant with the shape of a Greek cross)



Inside byzantine churches





Activity 6 (5 Points) Is there any Byzantine Empire construction in your country? If yes, write a brief description about it; if not, search on the net for anyone.

Some grammar help:

DEFINING				
.....	is/was a/an are/were	(generic term) place person thing concept entity device instrument tool etc	where who which that

MAKING DESCRIPTIONS
 Talking about ...
 First of all, define what is that you are talking about and where it comes from:
 This is a ... It comes from ...
 Then describe its appearance, structure, etc:
 It has ... It looks like ... It has a ... It is made up of ... It hasn't got ...
 Describe the location:
 It is found in ...
 Describe the function:
 ... has the job of ...-ing (verb ending in ing) ...
 It also does ...

The Romanesque



This art style is called Romanesque because adapted some Roman elements and was developed through the countries with Romance languages. Romanesque art was developed in Western Europe from the end of the X century, due to the end of the barbarian invasions that allowed to achieve a stability in Europe. The Romanesque style was characteristic of the feudal world and the supremacy of the Christian religion (making it the cultural focus). It is therefore considered the first architectural style to unify the criteria related to Christianity. The architecture was in the service of God.

At this period, economic development led to population growth and the creation of new cities, each with the need of the church creations, making these the most important Romanesque constructions. The churches were oriented from the east to the west, so that, the first ray of sunlight would enter the apse and the last one would leave through the entrance door. Above the join point of the arms of the cross (crossing) was built usually a tower or a dome (with the apse) and, on the floor, an altar. Also, it was usually building a bell tower next to the main entrance in order to announce the time for prayer and as a watchtower.

Romanesque churches



Saint Climent of Taüll church (Spain)

Bell tower
Dome



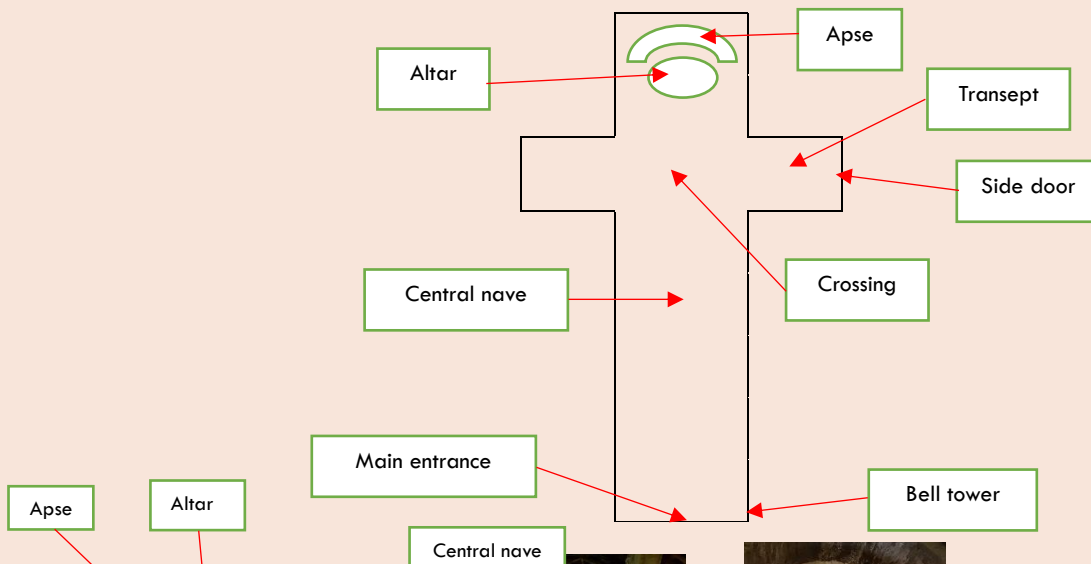
Sunlight



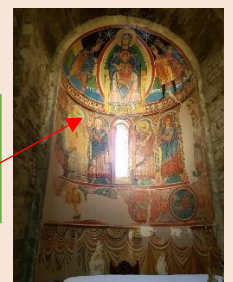
Church from the monastery of Saint Mary of l'Estany (Spain)

Bell tower
Dome

They had the floor plant with the shape of a Latin cross. Floor plant of a Romanesque church:



Romanesque pictures from Spanish churches



Crossing

Central nave

Bell tower

Main entrance

Central nave

Crossing

Side door

Transept

Apse

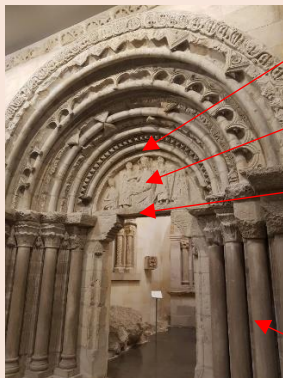
Altar

Altar

Apse

Romanesque architecture used large stone vaults to replace other materials. The weight of these stones made the vault very heavy and for this reason, thick walls were needed to support the constructions, and so, a few small spaces for windows were allowed.

The main entrance was usually flanked by an arch. This arch and the doors were decorated with reliefs and sculptures (most of the time related to religion).



Arch in a main entrance

- Archivolts
- Tympanum
- Lintel
- Jamb column



Romanesque Spanish cloister

- Capitals

- Small windows



Apse and altar

At this period, due to the importance of religion, very important monastic sets (cultural centres) were built according to church patterns. The capitals that appear on the columns of its cloisters shown religious images, scenes from the way of life, real or fantastical animals and plants.

It was also important the construction of walls that defended cities and palaces or castles to accommodate the nobles.



Medieval bridge in Besalú (Spain)



Medieval city of Carcassonne (France)



Medieval walls from Avila (Spain)



Activity 7 (11 Points) Match each picture with the correct word:

--	--	--

- | | | | | | |
|-------------|----------|----------|------------|--------------|------------|
| Jamb column | Apse | Dome | Bell tower | Altar | Archivolts |
| Transept | Crossing | Tympanum | Capital | Central nave | |

The Gothic



In the 12th century, demographic growth and economic and commercial prosperity began in Europe, leading into the emergence of a new social class, the bourgeoisie, and the growth of cities.

This new social class, with economic possibilities, was interested in education, promoting it. The demand for knowledge allowed the creation of schools and universities. As a consequence of this, new cognitions were developed in several fields, such as architecture, appearing new constructive techniques.

Faced with this situation, the church aims to show its power and began to promote the construction of huge religious buildings, with very careful work, especially in the cities (the new economic and political centre of power), resulting in what is known as a Gothic art.

The Gothic art was born in France and expands to all of western Europe. Palaces, city halls and big cathedrals (the main church of the cities, governed by a bishop) were beginning to be built. Some of these cathedrals are considered as a World Heritage by the UNESCO. Many cathedrals were built over several centuries, with the influence of different architectural styles, but always with a large Gothic base.

Some european Cathedrals declared as a World Heritage by the UNESCO

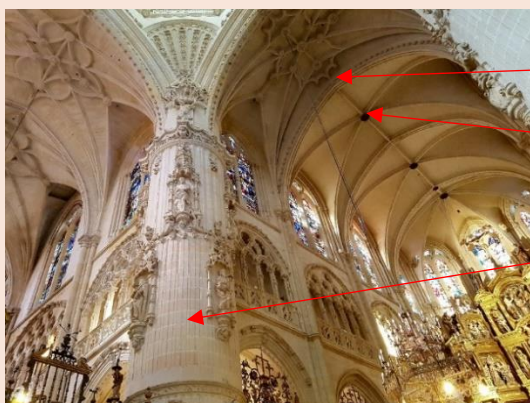


Burgos Cathedral (Spain)



Cologne Cathedral (Germany)

Some new techniques such as the pointed arches (lighter than other similar constructions), the ribbed vaulting supported by columns and a system of buttresses and flying buttresses, between others, allowed to build higher and opening buildings in which the weight of the roof did not rest on the walls of the construction, and so, stained glasses and rose windows were built.



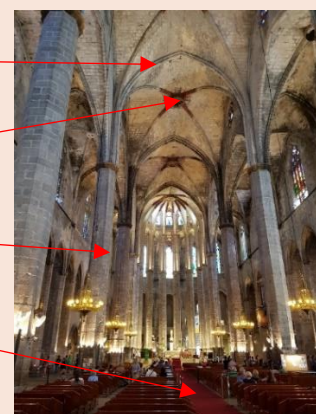
Burgos Cathedral (Spain)

Pointed arches

Ribbed vaulting

Columns

Central nave



Santa Maria del Mar, Barcelona, Spain

The luminosity and size of the cathedrals intended to create a space to approach God. For this reason (the approach to God), Gothic Cathedrals are built with a great sense of verticality, in front of the horizontal constructions of the Romanesque.



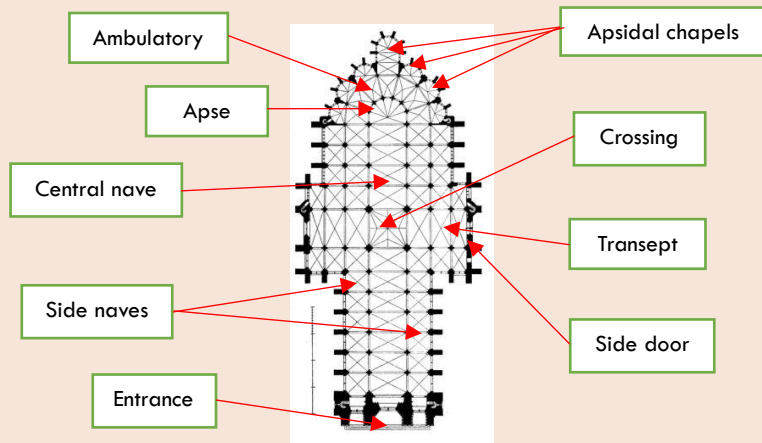
Stained glasses



Rose windows

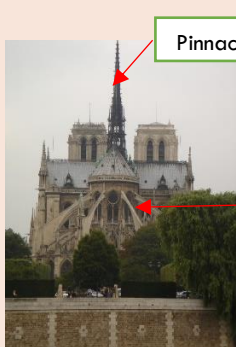


The interior of the cathedral, representing a Latin cross, was divided into three or five longitudinal naves (the central one being the largest), a short transept and an ambulatory surrounded by chapels (apsidal chapels). Sometimes, three doors (or five) were built, and mullions (column that form a division between a door) as well.

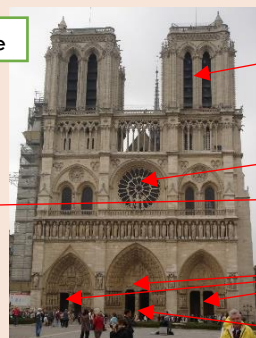


Floor plant of a Gothic Cathedral

Furthermore, there were built, on the exterior of the roof, spires and pinnacles, in the form of pyramid or cone, in order to make the construction higher.



Pinnacle



Notre Dame of Paris (France)

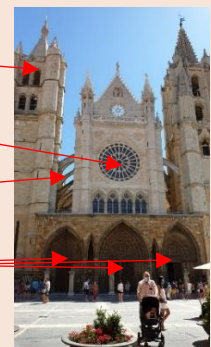
Bell tower

Rose windows

Flying buttresses

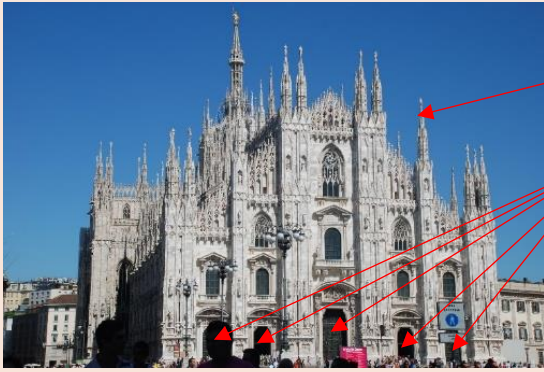
Three doors (three naves)

Mullion



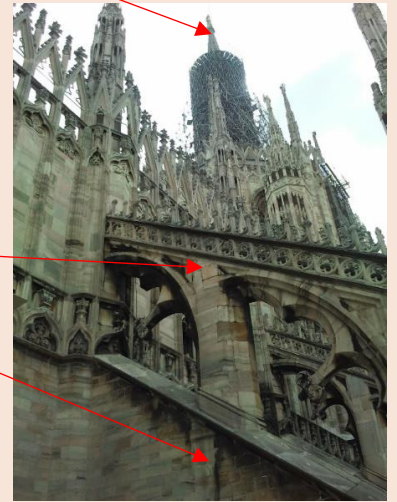
Leon Cathedral (Spain)

Duomo (Cathedral) of Milano (Italy)



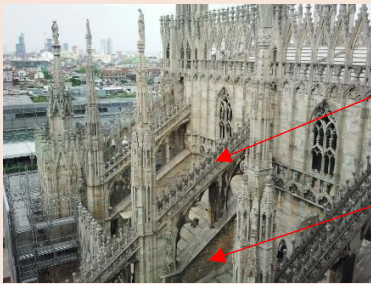
Pinnacles (some sculptures)

Five doors (five naves)



Flying buttresses

Buttresses



To remove the water from the roof gargoyles were used in various forms. As example, are very known the gargoyles of Notre Dame of Paris.

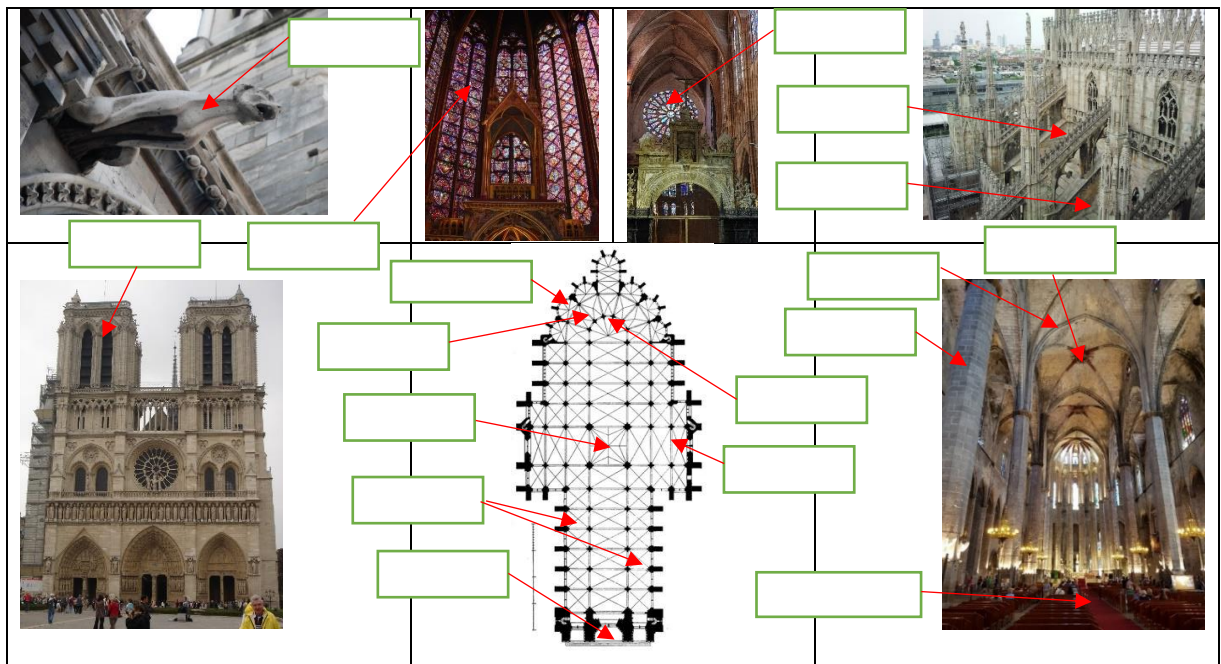
Gargoyles



Go to the next link "http://www.viajesvirtuales.es/leon_cathedral_leon_leon_espana-1013-en.html". Here you can make a virtual trip inside the Leon Cathedral (Spain); and to the links "<https://www.youtube.com/watch?v=nppHDNH2zIQ>" and "<https://www.youtube.com/watch?v=v7WmOrtO5FE>", showing "Notre Dame of Paris" (France)



Activity 8 (17 Points) Match each picture with the correct word:



Apse	Crossing	Central Nave	Side Naves	Entrance	Column	Transept
Apical chapels		Ambulatory	Bell tower	Stained glasses		Buttresses
Gargoyles		Flying buttresses	Rose windows	Pointed arches		Ribbed vaulting



Activity 9 (10 Points) Watch the video “Romanesque vs Gothic architecture” in “https://www.youtube.com/watch?v=19_j0K_Y0zQ”. After watching the video, write 5 differences between the Romanesque and the Gothic architecture.

Some grammar help:

COMPARING AND CONTRASTING

- For similarities

- is similar to ... (in that/in)
- similarly
- ... and ... are similar (in that/in so far as ...)
- ... is like ... (in that/in so far as ...)
- like
- equally
- in similar manner
- moreover
- in the same way
- ... and ... both have ... in common

- For differences

- ... is unlike ... (in that/in so far as)
- in contrast/alternatively
- compared with
- in comparison with
- ... is different from ... (in that/in so far as)
- on the one hand/on the other hand
- instead of
- however, /otherwise,
- ... differs from ... in respects: (firstly, etc.)
- ... can be distinguished from ...
- alternatively
- from a different point of view
- from a different perspective

The Renaissance



In the 15th century, a significant economic growth occurred in Europe due to the increase in product manufacturing, the rise of trade in the continent and the discovery of new territories by Spain and Portugal.

This economic growth encourages the emergence of “patrons” that supported, among others, the artistic costs of the time.

In this context new artistic trends are emerging in Italy, which, at different speeds, are spreading throughout Europe.

The Renaissance aims at a revival of the Classical (Greek and Roman) Culture.

With the emergence of humanism, man became the centre and referencing of everything (thus replacing the Deism proper to the Middle Ages), which led to an attempt to find a perfect harmony between human people and the different constructions.

The use of geometry and symmetry in buildings was encouraged to give a sense of order and balance.

The buildings’ floor was usually square. Symmetrical facades around their vertical axis and columns with the Greek orders (Corinthian order and Composite order) and composite orders were used. Semi-circular voussoir arches, barrel vaults and the half-sphere domes (a very important element in churches) were used as well. In terms of town planning, attempts were made to obtain order in the provision of buildings and gardens.

Chambord Castle (France)



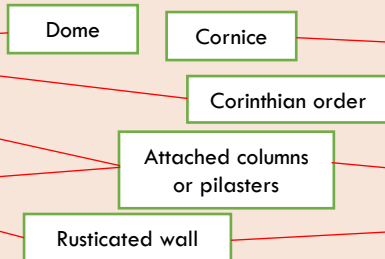
Double helix scale, which allows two people to climb at the same time without crossing at any time.

The most important types of constructions in this period were churches, palaces and suburban villas (based on the ancient Roman villas). Hospitals, theatres, libraries, bridges and triumphal arches were also built.

The shape of the Renaissance church floor was the basilica (in the form of a Latin cross, with a large nave and a dome on the crossing) or the central (in the form of a Greek cross or with circular shape).

Renaissance palaces used to have a cubic appearance with cornices on the ceiling.

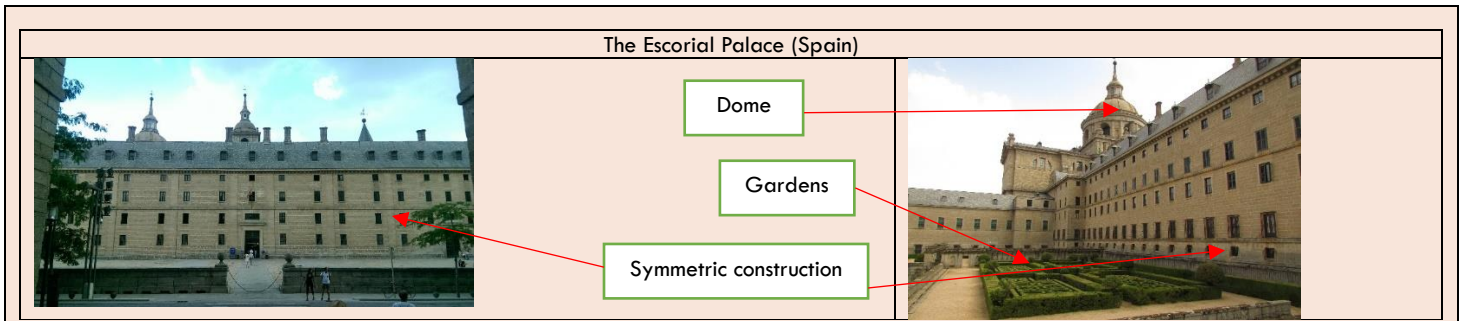
“Generalitat” of Catalonia (Catalonian government building), Barcelona (Spain)



Charles V Palace in Granada (Spain)

Charles V Place inside the Alhambra





Ubeda and Baeza are two Spanish cities declared as World Heritage by the UNESCO for its renaissance buildings.



Saint Marie Fountain, Baeza (Spain)



Activity 10 (5 Points) Write five of the features of Renaissance architecture.

Some grammar help:

DEFINING				
.....	is/was a/an are/were	(generic term) place person thing concept entity device instrument tool etc	where who which that

MAKING DESCRIPTIONS

Talking about ...

First of all, define what is that you are talking about and where it comes from:

This is a ... It comes from ...

Then describe its appearance, structure, etc:

It has ... It looks like ... It has a ... It is made up of ... It hasn't got ...

Describe the location:

It is found in ...

Describe the function:

... has the job of ...-ing (verb ending in ing) ...

It also does ...

The Baroque-Rococo



Baroque architecture developed between the late 16th and the 18th century. It arose in Italy (Europe is confronted by religious disputes between Catholics and Protestants). From Italy it expanded throughout Europe and America (by colonization). The most important buildings in this period are the palaces (Europe lived a political stage of absolutism) and the churches (in order to show Catholic superiority over Protestantism). Baroque architecture aims to give ornamental and monumental wealth to its constructions. For this reason, they attempted to gain a certain dynamism with the use of curves and undulations. A continuity and infinitude effect are to be achieved with highly ornamental decoration and the use of chiaroscuro.

Carthusian Monastery of Granada (Spain)



Highly ornamental decoration

Twisted columns

by Palickap <https://search.creativecommons.org/photos/d04b0d67-d65d-4baa-9ebb-fcef76d90a5a>

The symmetry of the Renaissance was maintained, but with the use of new geometric shapes.

San Peter Basilic (Vatican) (Renaissance and Baroque architecture)



Dome

Columns



Symmetry construction

Trevi Fountain, Rome (Italy)



Twisted columns (often just decorative) were used, which allowed for this feeling of motion that was sought. Domes were used as well.



Saint Peter's Canopy (Vatican)

Twisted columns



The use of abundant windows is consolidated and the interiors were decorated with wonderful frescoes. Twisted and grandiloquent stairs were built. Mirrors were usuals in Palaces to give grandiosity to the rooms. Similarly, the nature reasons were very much present.

Urbanism also developed, proposing large avenues, rounded squares and the construction of geometric and majestic gardens with fountains and lakes.

In this context, certain parts of Europe appeared in what is known as Rococo art, which appears in France and also develops in Germany. This style is characterised by luxury and refined art, unlike Baroque, which is intended to make art more human and accessible.



"Les Invalids", Paris (France)

Dome

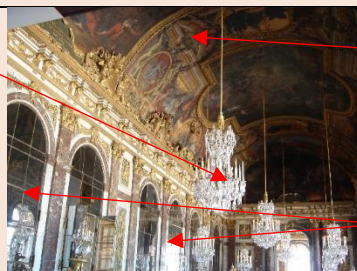
OPTIONAL: Watch the video "Versailles, France: Ultimate Royal palace" in " <https://www.youtube.com/watch?v=194CDIsFpQA> ", about Versailles Palace.

Versailles Palace (France)



Versailles Palace

Ceiling
lamp



Frescoes

Pictures

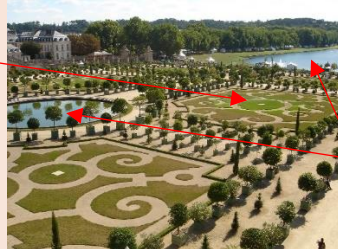
Mirrors



Gardens

Lakes

Fountains



Lakes



Frescoes

Columns

This style is regarded as the last art movement with features common throughout Europe.



Activity 11 (5 Points) Why do you think Baroque-Rococo architecture appeared in some church constructions?

Some grammar help:

GIVING OPINIONS

In my opinion ... / From my point of view ...

I think ...

I answered

I think so. / I don't think so.

I agree. / I don't agree. / I disagree.

Give me a reason for that.

RELATION CAUSE-EFFECT. GIVING REASONS

therefore

as a result

because/thanks to

consequently/so

for example

for instance

so

that is why

thus

such as

... is produced by

.... cause ...



Activity 12 (10 Points) How did the Baroque-Rococo architects intend to obtain the dynamism in their constructions? Write five of the features of Baroque-Rococo architecture.

Some grammar help:

DEFINING

.....	is/was a/an are/were	(generic term) place person thing concept entity device instrument tool etc	where who which that
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MAKING DESCRIPTIONS

Talking about ...

First of all, define what is that you are talking about and where it comes from:

This is a ... It comes from ...

Then describe its appearance, structure, etc:

It has ... It looks like ... It has a ... It is made up of ... It hasn't got ...

Describe the location:

It is found in ...

Describe the function:

... has the job of ...-ing (verb ending in ing) ...

It also does ...



Activity 13 (6 Points) Write three differences and three similarities between the Renaissance and the Baroque-Rococo architectures.

Some grammar help:

COMPARING AND CONTRASTING

- For similarities

is similar to ... (in that/in)

similarly

... and ... are similar (in that/in so far as ...)

... is like ... (in that/in so far as ...)

like

equally

in similar manner

moreover

in the same way

... and ... both have ... in common

- For differences

... is unlike ... (in that/in so far as)

in contrast/alternatively

compared with

in comparison with

... is different from ... (in that/in so far as)

on the one hand/on the other hand

instead of

however, /otherwise,

... differs from ... in respects: (firstly, etc.)

... can be distinguished from ...

alternatively

from a different point of view

from a different perspective