ARCHITECTURE IN EUROPE (Part 1)



INTRODUCTION. THE CLASSICAL ARCHITECTURE

STUDENT' WORKSHEET

Names:

Surnames:

Date:

Group:

Qualification

ARCHITECTURE IN EUROPE (PART 1) Introduction. The Classical Architecture.

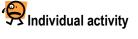
Introductory text



Many of the most important architectural movements in human history took place in **Europe**. In this scenario you are going to learn the importance of Europe in the world of architecture for many centuries, and the main features of each of them. Some of these movements are the Classical Architecture (developed both the ancient Greece and the Roman Empire), the Romanesque, the Byzantine, the Gothic, the Renaissance, the Baroque, the Neoclassicism, the Modernism, among many others. Some of them took place just in certain parts of Europe, such as the "Mudejar" Architecture in the Iberian Peninsula.

In this scenario, we are going to learn lot of things about architecture. Let's go!!!

INFORMATION ABOUT ACTIVITIES:







PREVIOUS ACTIVITY (SELF-ASSESSMENT ACTIVITY)

Previous activity (13 Points) To know your previous knowledge, choose the best answer for these questions. If the questions can have more than one possible answer (indicated) choose all of them. If it isn't indicated, and there is more than one correct answer, choose the best one). At the end of the activity, you will know the correct answers. Each correct answer: 1 point. If you don't find the response, don't worry, it's just to know your previous knowledge.

- 1. Which of the following architectonic movements started in Europe? (more than one possible answer)
 - a. Persian architecture.
 - b. Romanesque.
 - c. Daoist architecture.
 - d. Gothic.
 - e. Asuka architecture.
 - f. Baroque.
 - g. Ming dynasty architecture.
 - h. Renaissance architecture.
 - i. Jaini architecture.
 - j. Ancient Rome architecture.

2. What are the names of the next ancient Greece orders?



- a. 1 Corinthian, 2 Ionic, 3 Doric.
- b. 1 Doric, 2 Corinthian, 3 Ionic.
- c. 1 Doric, 2 Ionic, 3 Corinthian.
- d. 1 Ionic, 2 Doric, 3 Corinthian.
- 3. What is the name of the columns with women figure used in the Ancient Greece?



- a. Homen pillars.
- b. Athenea columns.
- c. Caryatides.
- d. Aegean columns.
- 4. The correct order of the following architectural movements, from the oldest to the most modern is:
 - a. Roman Empire architecture, Ancient Greece architecture, Gothic, Romanesque.
 - b. Ancient Greece architecture, Romanesque, Gothic, Neoclassicism.
 - c. Roman Empire architecture, Neoclassicism, Modernism, Romanesque, Gothic.
 - d. Romanesque, Ancient Greece architecture, Neoclassicism, Gothic, Baroque.
- 5. The architectonic movement of this church is:
 - a. Gothic.
 - b. Romanesque.
 - c. Baroque.
 - d. Modernism.



- 6. The architectonic movement of the Leon cathedral is:
 - a. Gothic.
 - b. Romanesque.
 - c. Baroque.
 - d. Modernism.
- 7. This picture is:
 - a. A Roman Amphitheatre.
 - b. A Roman Circus.
 - c. A Roman Theatre
 - d. A Greek Pediment.
- 8. This picture (the Colosseum) is:
 - a. A Roman Amphitheatre.
 - b. A Roman Circus.
 - c. A Roman Theatre
 - d. A Greek Pediment.

9. The architectonic movement of the "Batlló house", in Barcelona, is:

- a. Gothic.
- b. Romanesque.
- c. Baroque.
- d. Modernism.

CORRECT ANSWERS (each correct answer 1 point; some have more than one point. Maximum 13 points):

- 1: **b**, **d**, **f**, **h**, **j**
- 2. d (1. lonic, 2 Doric, 3 Corinthian)
- 3. c (Caryatides)
- 4. **b**
- 5. b (Romanesque)
- 6. a (Gothic)
- 7. c (Roman Theatre)
- 8. a (Roman amphitheatre)
- 9. d (Modernism)











FINAL SCORE (PREVIOUS KNOLEDGE)

COULD BE BETTER	SATISFACTORY	GOOD	YOU ARE AN ARCHITECTURE EXPERT
Less than 2 correct answers	3-5correct answers	6-9 correct answers	10-13 correct answers

World Heritage in Europe



Europe is the continent with more buildings declared as World Heritage by the UNESCO. That is what in Europe we can enjoy many buildings and protected historic centres of cities considered as goods with cultural interest. There's a wide range of architectural styles in Europe, as a result of the large number of cultures that have converged in the continent.

We must try to learn more about the European Architecture and enhance the protection of all these sites.

Activity 1 (50 Points) Europe has great architectural wealth, with a wide variety of architectural styles. Many of its buildings are known throughout the world. Write the **country** (**not the city**) in which we can find these known European constructions, some of them declared as a World Heritage by the UNESCO. (If needed you can surf on the net to find some information)

1. In which country can we find the next leaning tower?

- a. Spain.
- b. France.
- c. India.
- d. Italy.
- e. Greece.

2. In which country can we find the Merida theatre?

- a. Spain.
- b. Italy.
- c. Greece.
- d. France.
- e. Germany.





- 3. In which country can we find this amphitheatre called Colosseum?
 - a. Spain.
 - b. Italy.
 - c. Greece.
 - d. Germany.
 - e. France.
- 4. In which country can we find the Parthenon?
 - a. Italy.
 - b. United Kingdom.
 - c. Romania.
 - d. Greece.
 - e. Turkey.
- 5. In which country can we find the Segovia aqueduct?
 - a. Italy.
 - b. Greece.
 - c. Spain.
 - d. France.
 - e. Crete.
- 6. In which country can we find this city that was buried under ashes for many centuries? (Pompei)
 - a. Greece.
 - b. Spain.
 - c. France
 - d. Italy.
 - e. U.S.A.

7. In which country can we find next construction? (The Atomium)

- a. Germany.
- b. Netherlands.
- c. Greece.
- d. United Kingdom.
- e. Belgium.

8. In which country can we find next parliament that is one of the biggest buildings in the world?

- a. Germany.
- b. Spain.
- c. Greece.
- d. Romania.
- e. United Kingdom.













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https://search.creativecommons.org/photos/8fb8aca0-355f-4f87-b030-06acd95f1614

9. In which country can we find the next construction? (Mont Saint Michel)

- a. United Kingdom.
- b. Ireland.
- c. France.
- d. U.S.A.
- e. Italy.

10. In which country can we find the next construction? (Pantheon)

- a. Greece.
- b. Italy.
- c. France
- d. U.S.A.
- e. Turkey.

11. In which country can we find this catholic cathedral inside a mosque?

- a. Morocco.
- b. Italy.
- c. Greece.
- d. Spain.
- e. France.

12. In which country can we find the

Basilica of San Peter?

- a. Italy.
- b. France.
- c. Germany.
- d. Vatican.
- e. United Kingdom.

13. In which country can we find this parliament and the Big Ben?

- a. France.
- b. United Kingdom.
- c. U.S.A.
- d. Italy.
- e. Sweden.

14. In which country (not the city) can we find this famous cathedral? (Notre Dame)

- a. Paris.
- b. United Kingdom.
- c. Germany.
- d. Italy.
- e. France.





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- 15. In which country can we find the Alhambra?
 - a. Morocco.
 - b. Turkey.
 - c. Italy.
 - d. Spain.
 - e. France.

16. In which country can we find this cathedral, within which the graves of the three magic kings are supposedly located?

- a. France.
- b. Israel.
- c. Italy.
- d. Germany.
- e. United Kingdom.

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(Sagrada Familia) a. Italy. b. Japan.

17. In which country can we find this modernist church?

- c. U.S.A.
- d. Spain.
- e. Germany.
- 18. In which country can we find the medieval town of Carcassonne?
 - a. United Kingdom.
 - b. Italy.
 - c. France.
 - d. Czech Republic.
 - e. Germany.

19. In which country can we find this museum

(Guggenheim) made with titanium that has a dog made of flowers (Puppy) (representing a vertical garden) near its door?

- a. France.
- b. Italy.
- c. Belgium.
- d. Denmark.
- e. Spain.







20. In which country can we find the cathedral, within which rest the tomb of Charlemagne?

- a. Germany.
- b. France.
- c. Italy.
- d. U.S.A.
- e. United Kingdom.
- 21. In which country can we find this famous bridge?
 - a. France.
 - b. U.S.A.
 - c. Finland.
 - d. United Kingdom.
 - e. Scotland.
- 22. In which country can we find this construction (one of the most important museum in the world)? (Louvre)
 - a. U.S.A.
 - b. United Kingdom.
 - c. France.
 - d. Italy.
 - e. Germany.

23. In which country can we find windmills used to gain land at the sea, and some cities with water canals? (Look at the pictures)

- a. France.
- b. U.S.A.
- c. Netherlands.
- d. Spain.
- e. Greece.
- 24. In which country can we find Stonehenge?
 - a. Scotland.
 - b. Ireland.
 - c. France.
 - d. United Kingdom.
 - e. Germany.



Charlemagne tomb









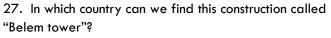


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- 25. In which **country** (**not city**) can we find the next structure?
 - a. Italy.
 - b. Paris.
 - c. London.
 - d. France.
 - e. Germany.

26. In which country can we find a city with canals, and the Basilica of Saint Marcos with its tower belfry?

- a. Greece.
- b. France.
- c. Italy.
- d. Turkey.
- e. United Kingdom.



- a. Israel.
- b. Italy.
- c. Portugal.
- d. France.
- e. Vatican.







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- 28. In which country can we find the Schönbrunn palace?
 - a. Germany.
 - b. Austria.
 - c. Slovakia.
 - d. Croatia.
 - e. France.



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29. In which country can we find this parliament located next to the Danube River?

- a. Germany.
- b. Austria.
- c. Hungary.
- d. Netherlands.
- e. Russia.



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30. In which country can we find this cathedral called "Duomo" made with marble?

- a. France.
- b. Germany.
- c. United Kingdom.
- d. India.
- e. Italy.

31. In which country can we find the Coimbra University, one of the oldest in the world (1290)?

- a. France.
- b. Germany.
- c. United Kingdom.
- d. Portugal.
- e. Italy.

32. In which country can we find this cathedral in which there are the remains of an apostle? There is a famous pilgrimage trail ending in the Cathedral.

- a. France.
- b. Germany.
- c. United Kingdom.
- d. Spain.
- e. Italy.

33. In which country can we find the Vlad Tepes ("Dracula legend") castle (Bran castle)?

- a. Austria.
- b. Germany.
- c. Hungary.
- d. Italy.
- e. Romania.

34. In which country can we find this astronomical clock located in the ancient city hall of its capital?

- a. France.
- b. Germany.
- c. Czech Republic.
- d. Hungary.
- e. Italy.

35. In which country can we find the Neolithic site of Khirokitia (Khoirokoitia), located on a Mediterranean Island?

- a. Malta.
- b. Italy.
- c. Spain.
- d. Cyprus.
- e. France.















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- 36. In which country can we find the Kronborg castle?
 - a. France.
 - b. Germany.
 - c. Denmark.
 - d. Norway.
 - e. Sweden.

37. In which country can we find this city known for its wines, with a metal bridge designed by Théophile Seyring (member of the Eiffel company) crossing the Douro River, with the known cleric Tower and the "Sé" Cathedral?

- a. France.
- b. Germany.
- c. Spain.
- d. Portugal.
- e. Italy.

38. In which country can we find next Kings' Palaces: one as the official Kings' residence and the other (Drottningholm) as the private Kings' residence?

- a. Sweden.
- b. Germany.
- c. Finland.
- d. Austria.
- e. Denmark.









Official kings' residence

Drottningholm Palace. Private kings' residence

by AbhijeetVardhan https://search.creativecommons.org/photos/bfeddc13-67f9-4c4a-a46c-83f6c241737e by byb64 https://search.creativecommons.org/photos/46ae769f-0a35-4128-9837-76256c41b83a

39. In which country can we find next castles and maybe "Nessie"?

- a. France.
- b. England.
- c. Ireland.
- d. Switzerland.
- e. United Kingdom.

40. In which country can we find this strange building called "Krzywy Domek" (crooked house)?

- a. France.
- b. Germany.
- c. Poland.
- d. Hungary.
- e. Lithuania.













41. In which country can we find the Neuschwanstein Castle (in the Black Forest) that inspired Walt Disney to build his "Sleeping Beauty Castle"?

- a. France.
- b. Germany.
- c. United Kingdom.
- d. Austria.
- e. Italy.

42. In which country can we find the City of Arts and Science of Valencia (buildings designed by Santiago Calatrava and Felix Candela)?

- a. France.
- b. Germany.
- c. United Kingdom.
- d. Italy.
- e. Spain.





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43. In which Mediterranean country (formed by different islands) can we find next Tarxien Temples (Megalithic constructions)? (Is the only European Mediterranean country with the English as one of the official languages)

- a. France.
- b. Italy.
- c. Cyprus.
- d. Greece.
- e. Malta.

44. In which country (known as the country of the thousand lakes) can we find the Uspenski Cathedral, regarded as the largest Orthodox Church in Western Europe?

- a. Greece.
- b. Italy.
- c. Cyprus.
- d. Bulgari.
- e. Finland.

45. In which country (part of an island) can we find "Brú na Bóinne" (Megalithic constructions) and "Skellig Michael" (set of monastic buildings around the 7th century)?

- a. Island.
- b. Ireland.
- c. Denmark.
- d. United Kingdom.
- e. Cyprus.



Skellig Michael by Arian Zwegers https://search.creativecommons.org/photos/bd23cac2-fe3b-4210-81b0-0237b6c2c491



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Brú na Bóinne by Barbara y Eugenio https://search.creativecommons.org/photos/5be09983-198d-40c5-bfb5-14cc140b422e





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by <u>Ari Helminen</u>

Architecture in Europe

by <u>Arian Zwegers</u> https://search.c 1a97-4a3f-a3bb-b32b1542f354 mmons.org/photos/a147fcbf

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46. (5 Points) Write, in order, the five European countries that have more sites declared as a World Heritage by the UNESCO. Follow the example:

- The first European country with more sites declared as a World Heritage by the UNESCO is (country)...... whit (number) places.

- The second

CORRECT ANSWERS (each correct answer 1 point):

1. d	2. a	3. b	4. d	5. c	6. d	7. e	8. d	9. c	10. b
11. d	12. d	13. b	14. e	15. d	16. d	17. d	18. c	19.e	20. a
21. d	22. c	23. c	24. d	25. d	26. c	27. c	28. b	29. c	30. e
31. d	32. d	33. е	34. c	35. d	36. c	37. d	38. a	39. e	40. c
41. b	42. e	43. e	44. e	45. b					

46. (Answer could change): 1. Italy, 2. Spain, 3. Germany, 4. France, 5. United Kingdom.

COULD BE BETTER	SATISFACTORY	GOOD	YOU ARE AN EUROPEAN ARCHITECTURE EXPERT
Less than 12 correct answers	13-25 correct answers	26-38 correct answers	39-50 correct answers

The Classical Architecture



It's well known as the European Classical Architecture the one that took place during the period of the Ancient Greece and the Roman Empire. However, different architectural movements of each region were developed previously and simultaneously in Europe, even though the Greeks and Romans were the ones that expanded their culture away Europe.

Reference or during the Ancient Greece (10 Points) Write some people who lived in your country before or during the Ancient Greece or the Roman Empire time and write the main aspects related with their constructions.

Some grammar help:

			 MAKING DESCRIPTIONS
	DEFINING		Talking about
 is/was a/an are/were	(generic term) place person thing concept entity device instrument tool etc	where who which that	 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 ofing (verb ending in ing) It also does

Example: The Iberians. The Iberians were a group of peoples that inhabited the Iberian Peninsula, at least from the 6th century BC and during the Roman rule. The Iberians made their constructions with large stones, used for housing and protective walls. The houses were rectangular in shape, with windows and doors made of wood. The walls were made of mud mixed straw, and clay on the floor.

Architecture in the Ancient Greece



The Ancient Greeks were a mix people who established their cities in the Balkan Peninsula, the Aegean and the Ionian islands, and in the coast of the actual Turkey.

Greeks were merchants and created some colonies around the Mediterranean and the Black seas (before Alexander the Great).

The Ancient Greek architecture tries to find beauty, symmetry, harmony and proportion in constructions. The most important buildings made by Ancient Greeks were **Temples** (built to honour divinities) and **Theatres** (open structure used for dramatic performances). They built some sporting buildings as well, such as "Gymnasiums", "Palaestras" and "Stadiums". **Houses** had in the middle a courtyard to obtain light and to practice different activities. **Stoas** were a covered way made by columns designed for public use. **Fortifications** protected the cities.

The architectural elements more used in **temples** by the Ancient Greeks (between others) were columns, friezes, pediments, architrave, cornice, plinth, naos and propylaea.

Columns: Tall columns were very used. Columns were built in three different styles (or "orders"), the **Doric** (the simplest one, using thick columns with grooves, with not decoration at the base and a simple capital at the top), the **Ionic** (tinner columns than the Doric style, with a platform at the bottom, and capitals with scrolls), and the **Corinthian** (based in Ionic columns with capitals decorated with scrolls and acanthus leaves).

Sometimes columns had forms of women. These types of columns were called Caryatides.



Friezes: The frieze is a horizontal and decorative element above the columns, usually with relief sculptures that told stories or important events.

Pediment: Triangular structure located between the friezes and the roof, usually decorated with sculptures. **Architrave**: Lintel or beam that rests on the capitals of columns.

Cornice: Top element of the entablature, horizontal section of a building immediately above a series of columns and below the roof.

Plinth: Lower square slab at the base of a column.

Naos or (Cella): Was the inner chamber in a temple.

About the materials used, marble was very important for Ancient Greeks. Also, other stones were used, as well as wood.

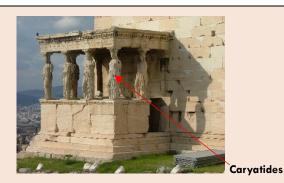
Propylaea: Monumental gateway used as the entrance of some temples.

Theatres were composed of a seating area, a circular space for the chorus and the stage.



TECHNOLOGY



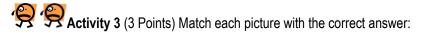


Theatres were an open-air construction used for dramatic performances. Ancient Greek theatres were composed by "the cavea" (the seating area for spectators), "the orchestra" (space used for the chorus to help in the performances), and "the stage" (place were theatral performances took place).



Picture mode by: Michael & Sherry Martin https://search.creativecommons.org/photos/b5107abc-c751-4c8e-b82d-931ecae1fe3c

Watch the video "The Parthenon-3D reconstruction" in "<u>https://www.youtube.com/watch?v=PWPCZ1UjYmi</u>", about The Parthenon.



- 1. The name of this Greek order is:
 - a. Doric.
 - b. lonic.
 - c. Corinthian.
 - d. Compositive.



Mode by: <u>Penn State Libraries Pictures Collection</u> <u>https://search.creativecommons.org/photos/13b0377a-8801-</u> <u>4fcc-a8cf-9462986c4a68</u>

- 2. The name of this Greek order is:
 - a. Doric.
 - b. lonic.
 - c. Corinthian.
 - d. Compositive.



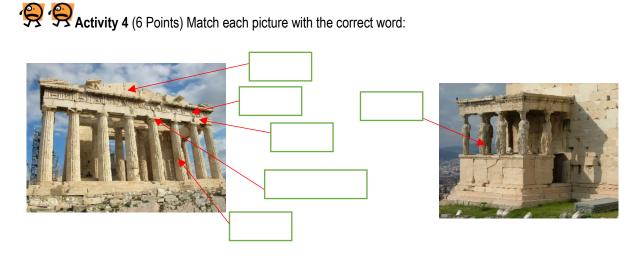
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- 3. The name of this Greek order is:
 - a. Doric.
 - b. lonic.
 - c. Corinthian.
 - d. Compositive.

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Architrave

Column Pediment

Caryatide

Doric order Frieze

Architecture in the Roman Empire

OPTIONAL: Watch the video "History in 3D-Ancient Rome 320 AD. The center of the eternal city" in

" <u>https://www.youtube.com/watch?v=kveAOZfDA44</u>", **about the Ancient city of Rome.**



Rome was a city that, after numerous wars, conquered many territories becoming an Empire who controlled all the Mediterranean Sea and parts of Egypt and U.K. Roman architects had Greek architecture as a reference, improving it in many respects. They also used the knowledge of Egyptians and the people that were conquered.

The architecture of the Roman Empire shows the eminently practical (functional architecture) of its constructions, buildings usually were done to achieve a purpose. Civil engineering was one of the pillars of Roman architecture, always with the aim of improving the lives of its citizens. They built their cities with lots of leisure buildings, roads, sewer's systems, thermal public baths, etc.

Romans designed measuring instruments and machines to lift heavy weights. They used some architectonic techniques such as the arch, the dome and the vault. Romans invented the known as a "**Roman concrete**" obtained by mixing volcanic ash with lime and water, then adding rocks such as volcanic rocks. Roman concrete allowed to build solid and light constructions without the use of large blocks of stones.



Materials used in constructions, between others, were stones, travertine, marble, alabaster, granite, and a type of bricks.

Some of the most important Roman constructions were temples, theatres, amphitheatres, circuses, aqueducts, triumph arches and commemorative columns, walkways, bridges, sewer's systems, thermal public baths, etc. Roman cities were protected by strong walls that kept safe them from possible attacks. In its centres there was a square, called the forum, which was the political and economic centre of Roman life.

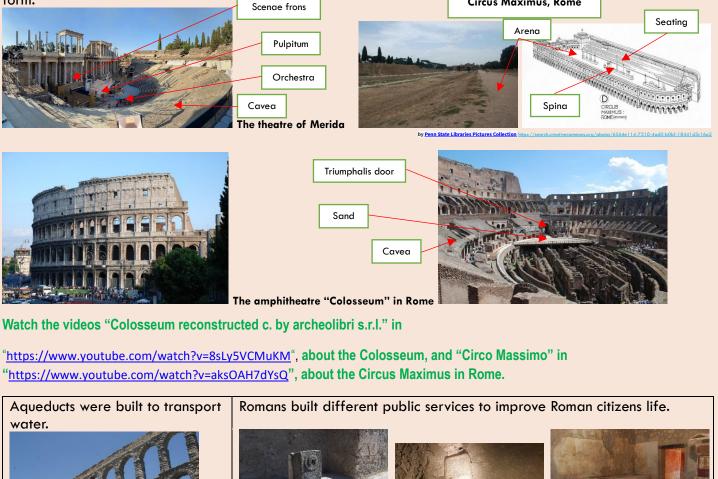


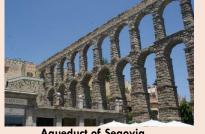




The Pompei forum

The most important difference between a theatre (place where several dramatic works were performed), and an amphitheatre (space used for circus games and gladiators fighting), is that the latter has a circular or oval shape, while the theatre has a semi-circular form. The circus, which was used for racing shows, had an elliptical form. **Circus Maximus, Rome**





Aqueduct of Segovia



Roman public fountain

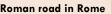


Sewer's system

Roman latrines

Important for the development of Roman civilization and its trade was the construction of roads that unites the different parts of the empire, and that converged, into the most important city: Rome. In order to cross some geographical features, such as rivers, they built arch-based bridges.







Roman bridge in Cordoba

Romans built commemorative constructions such as triumphal arcs and columns to show their power to the people.





Trajan column in Rome

Three types of dwellings existed in ancient Rome: the insula, the domus and the villa. The first two were built in urban sites (the first being more modest than the second), while the villas were country houses. The domus were formed by a set of rooms around a central courtyard called atrium, to brighten the rooms. Walls were decorated with paintings and floors with mosaics.





Roman houses in Pompei



TECHNOLOGY

Activity 5 (45 Points) Answer next questions about architecture in Ancient Roma Empire:

Some grammar help:

			MAKING DESCRIPTIONS
	DEFINING		Talking about
 ls/was a/an Are/were	(generic term) place person thing concept entity device instrument tool etc	where who which that	 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 ofing (verb ending in ing) It also does

1. (5 Points) What's the name of this Ancient Roman Empire construction? What was its use?



2. (5 Points) What's the name of this Ancient Roman Empire construction? What was its use?



3. (5 Points) What's the name of thist Ancient Roman Empire construction? What was its use?



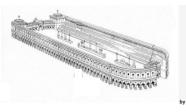
4. (5 Points) What's the name of this Ancient Roman Empire construction? What was its use?



TECHNOLOGY

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5. (5 Points) What's the name of this Ancient Roman Empire construction? What was its use?



6. (5 Points) Is there any Ancient Roman Empire walkway in your country? If yes, write the name and the cities that connect. If not, search on the net any walkway built by Romans.

7. (5 Points) Is there any Ancient Roman Empire construction in your country? If yes, write a brief description about it; if not, search on the net for anyone.

8. (10 Points) Watch the video "Pompei then and now" in

"<u>https://www.youtube.com/watch?v=IDCVcuVR5w8</u>", about the Ancient city of Pompei. After that, write a small composition about the city and what happened the 24th of august of 79 AD.

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				

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 ...

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 ...

ADDING TO A POINT

in addition furthermore besides also still/anyway and and/but, furthermore and/but besides too moreover and another thing ...