



Lesson #1: Architecture Features Through the Ages (1 class period)

Objectives

Students will be able to...

- Summarize the architecture features through Stone Ages to Neo-Classical Time.

Standards

LS 11-12.6
RSIT 11-12.2
RLST 11-12.2
Problem Solving/Critical Thinking 5.4
Health and Safety 6.2, 6.3, 6.4, 6.5, 6.6, 6.12
Technical Knowledge and Skills 10.1, 10.2, 10.3
Residential and Commercial Construction Pathway D2.1, D2.8, D2.9, D3.1, D3.2, D3.3, D3.4, D3.7
Responsibility and Leadership 7.4, 9.3

Materials

Architecture Features Through the Ages Power Point
<https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Aascds%3AUS%3A13c1a6c2-c67d-4e99-82b3-57554eb65296>
Architecture Features Through the Ages Worksheet

Lesson Sequence

- Introduce to students that a specific architectural style is characterized by a collection of design details. These details include size and shape of windows, the size and placement of a porch, and the presence or absence of columns.
- Review the ***Architecture Features Through the Ages PowerPoint*** with students.
- Have students fill in the ***Architecture Features Through the Ages Worksheet*** while reviewing the power point. Discuss and answer any questions students may have along the way.

Assessment

Check for understanding while presenting PowerPoint.
Grade student worksheets.
Reteach and clarify any misunderstandings as needed.

Accommodations/Modifications

Check for Understanding
One on One Support
Peer Support
Extra Time If Needed

Architecture Features Through the Ages Worksheet

As you watch the PowerPoint on Architectural Features Through the Ages fill in summary with the correct answers.

Paleolithic and Neolithic Era

1. What were the name of the traveling people who had first taken interest in building self-supported structures instead of the easily used, if available, caves?

2. What was the first most common substance used to build more permanent structure?

3. As humanity learned to farm as well as hunt, more permanent structures begin to appear. They homes were made from
_____.
4. What is one famous Neolithic structure made from megaliths?

5. Door and window openings in supporting walls were created, without losing structural integrity by what two methods?

Egyptian Architecture

6. Most of Egypt's ancient towns have been lost because they built

7. What construction method was used most often in early Egyptian structures?

8. Egyptians constructed with mudbrick as well, except the Egyptians added other components to their mudbrick, what was it?

9. These materials added tinsel strength. What is tinsel strength?

10. Egyptian people kept cool in hot weather by

11. Little attention was paid to buildings for everyday life. Egyptians paid more attention to building 3 other structures:

12. What were the Egyptians famous for constructing?

13. Who lived in the pyramids?

Greek Architecture

14. Ever since the Geometric Period (900-725 BCE), the main task of the Greek architect was:_____

15. Early Greek architecture employed wood, not stone. Timber was used mainly for roofing and was a very scarce commodity which affected a building

16. Greek temples, like Egyptian temples, used basic post-and-beam construction (column and lintel). This is sometimes referred to as _____

17. Once Greek designers became familiar with the Egyptian architect, Imhotep, they began the replacement of wood structures with stone. This was called

18. The use of stone led to 3 architectural systems for building with their strict rules. Describe them below.

Architectural system	Description

19. In their homes, the Greek people built what to act as a natural air-conditioner?

20. Why were burglars termed "wall piercers"? _____

21. The living arrangements in a Greek home were different than how we live. Explain the living arrangement for the Greeks.

Roman Architecture

22. Roman architects borrowed ideas from the _____ and improved them.
23. The Romans did not invent the arch. Arches have been used since prehistoric times. What ancient groups of people used them?

24. The Romans perfected the use of three architectural elements:

1. _____
2. _____
3. _____

25. Draw the forces that are applied on each stone in an arch. Draw the forces that are applied in beam construction. Which construction allows for larger interior space in Roman buildings? _____

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26. What is a vault in Roman construction? _____

27. With larger living spaces produced using arch construction, why were windows still limited in buildings?

28. What are the ingredients in Roman concrete?

29. Explain hydraulic cement.

30. Most Romans lived in insulas. Describe some characteristics of a typical insula and the quality of the building.

31. If you were of a higher class you would live in a building called a domus. Compare and contrast an insula and a domus.

Insula	Same	Domus

Architecture Features Through the Ages Worksheet – Answer Key

1. Neolithic architects
2. Mudbrick
3. Timber, straw, mud
4. Kermario Dolmen at Carnac North-west France
5. Post and lintel (beam)
6. Near the Nile Valley and were flooded
7. Post and beam style
8. Binding material like rice husks or straw
9. Resistance to bending or twisting
10. Sleeping on their roofs to catch the breeze
11. Pyramids, tombs, and temples
12. pyramids
13. pharaohs
14. To design temples honoring one or more Greek deities
15. Length and limited its use
16. Trabeated
17. Petrification
18. **Doric**-Simplest, rather sturdy, with plain, round capitals (top) **Ionic**-slender, fluted pillars, two opposed volutes (scrolls) on capitals. **Corinthian**-most ornate, slender fluted column, capital carved with two rows of leaves and four scrolls
19. Courtyards
20. They broke through the walls to enter homes
21. Men and women lived in different parts of the house-men's rooms were known as the androm and women were gynaikonitis
22. Greeks
23. Ancient Egyptians, Babylonians, and Greeks
24. Arch, vault, concrete
25. Vault
26. Extended arches
27. Privacy
28. Mortar (cement), mixed water, lime, volcanic ash sand
29. Set and harden even under water-helped build sewers, baths, and harbors
30. Various answers
 - a. Built around a courtyard with building on 3 sides and a wall on the 4th
 - b. 6-7 apartments

- c. Accommodates around 40 people
- d. Each apartment has 1 room, sometime 2
- e. Made of wood or mudbrick and sometimes collapsed or caught on fire
- f. No heating, running water or toilet

31.

Insula	Same	Domus
No heating	Courtyard or atrium	Backyard – peristyle Underfloor heating