

Engineering an Empire: Rome



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1. As an ambitious young general, he had recognized the road to glory in Rome began on _____ far from it?

Battlefields

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2. Julius Caesar led 8 Roman legions north through _____.

Gaul –
(France, Belgium,
Switzerland)



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3. How does Caesar and his engineers plan to cross the Rhine River?

He built a bridge across the river so they could “March” across.

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4. How many days did it take to construct the Rhine bridge?

10 Days!



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5. **What happened when the Germans saw the Romans legions crossing the Rhine River?**

They Fled to higher ground



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6. What did Caesar do after he crossed back over his bridge?

He disassembled it.



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7. How old was Caesar when he was crowned dictator for life?

55 years old



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8. What happened to the brothers in the story of Romulus & Remus?

Abandoned in the woods and raised by a she wolf.

Romulus killed Remus after a dispute over the building of their city.

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9. What did the Cloaca Maxima, the city's first engineering achievement, served as?

Extensive sewer system. Parts are still in use today

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10. In 312 B.C. the via appia, Rome's first national highway was how many miles long?

132 miles



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11. What was Rome's engineer's secret weapon that enabled them to build bigger, stronger, and faster, than anyone else?

Water proof concrete



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12. Of all the achievements of Rome's engineers, what was the most life altering?

Running water



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13. In the capital city, how many aqueduct lines were there? How many gallons of water did they supply to the city each day?

11 aqueduct lines

200 million gallons a day



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14. On the frontier, his legions conquered _____, something even Julius Caesar failed to do.

Britannia



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15. If the aqueduct walls needed to be higher than $6 \frac{1}{2}$ feet off the ground, the Romans saved building materials while still adding strength by perfecting this ancient engineering concept?

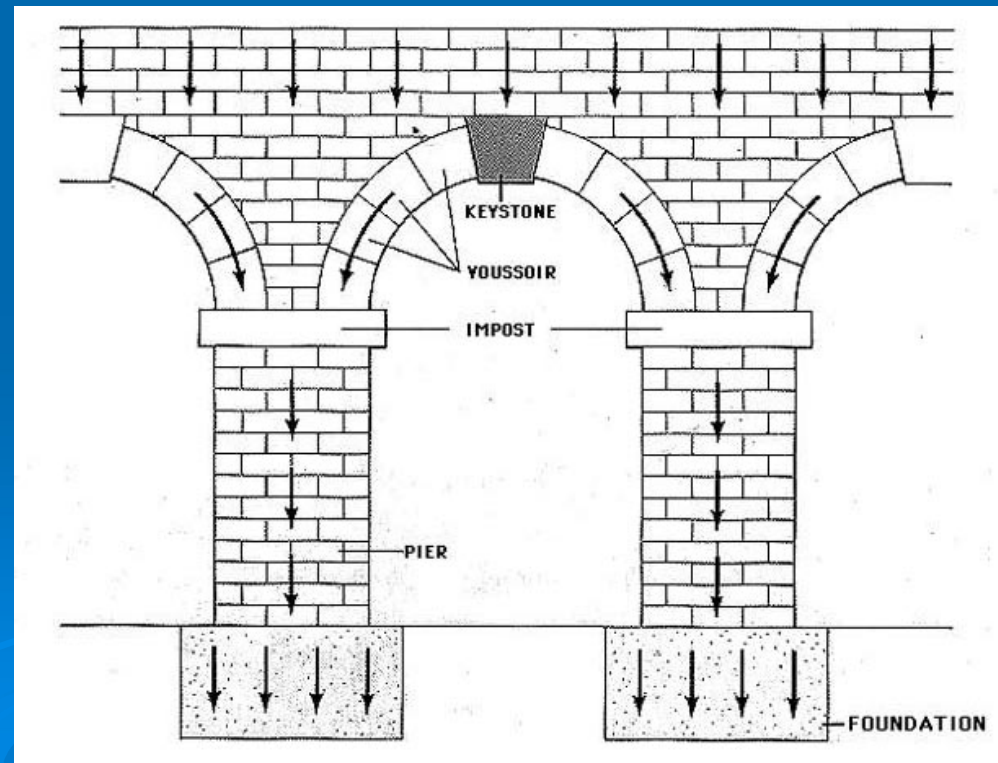
The Arch

The bottom right portion of the slide features a decorative graphic of several concentric, light blue circles resembling ripples on water, set against the dark blue background.

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16. What is the name of the last stone placed in the arch that evenly distributes the weight?

Key Stone



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17. Who did Claudius marry that sent shockwaves through the empire? What did she convince Claudius to do?

He married his own niece - Agrippina

Make her son Nero, his heir, instead of his own son

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18. Who was number one on the list of arson suspects that started the fire of 64 A.D.?

Nero himself



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19. Who did Nero blame for the fire?

A new religious group...

The Christians



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20. What was the fate of Agrapina?

Nero had her murdered



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21. What was the engineering innovation that is buried beneath Rome in Nero's Domus Aurea?

The vaulted ceiling



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22. What artists drew inspiration from the Domus Aurea when it was rediscovered? What did they call the art form that they found?

Renaissance artists
Grotesque



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23. Vespasian drained the massive lake that Nero built and constructed this famous Roman structure on the same site.

The Coliseum



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24. How tall did this imposing structure grow to in just 8 years?

160 feet tall



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25. Was it possible to flood the Coliseum for naval battle?

Yes!



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26. What was the purpose of the Hypogeum?

Staging area for the arena

Enabled animals and gladiators to pop up out of the floor using elevators and trap doors.

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27. What are two improvements under Trajan's building campaign?

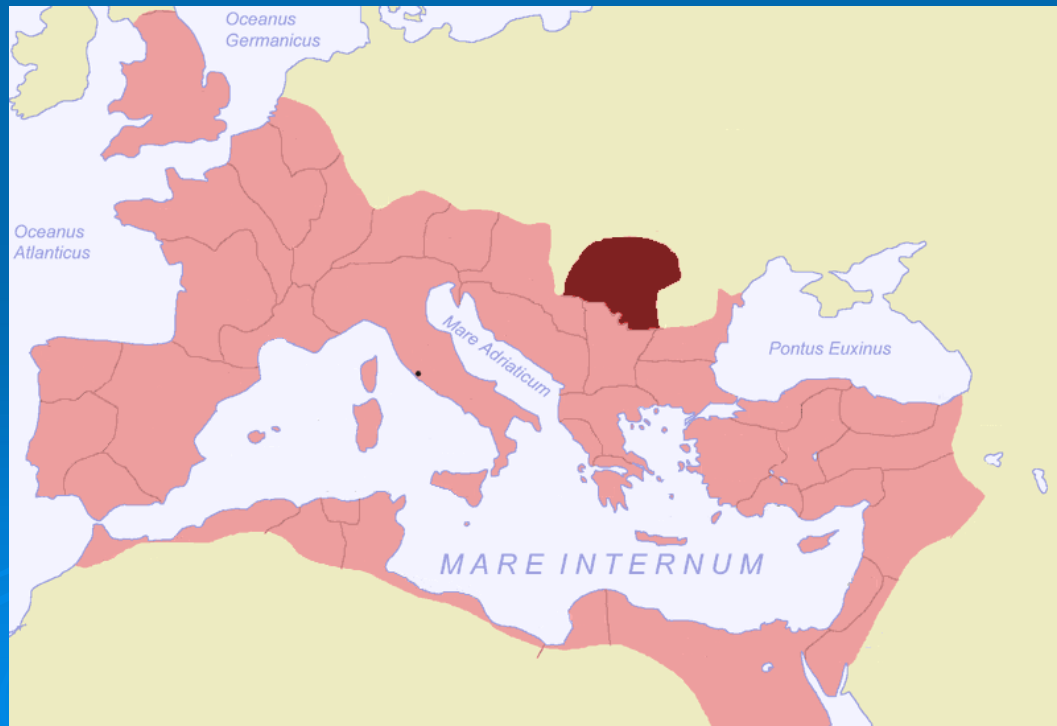
He make repairs to roads, harbors, public buildings

He had one of the last great aqueducts built and new public baths

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28. What province did Trajan conquer in order to acquire the money needed for his expansive building campaign?

Dacia



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29. What story does the Trajan Forum's centerpiece column tell?

His invasion of Dacia



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30. Hadrian's wall was 73 miles wide and _____ feet high.

15 feet high

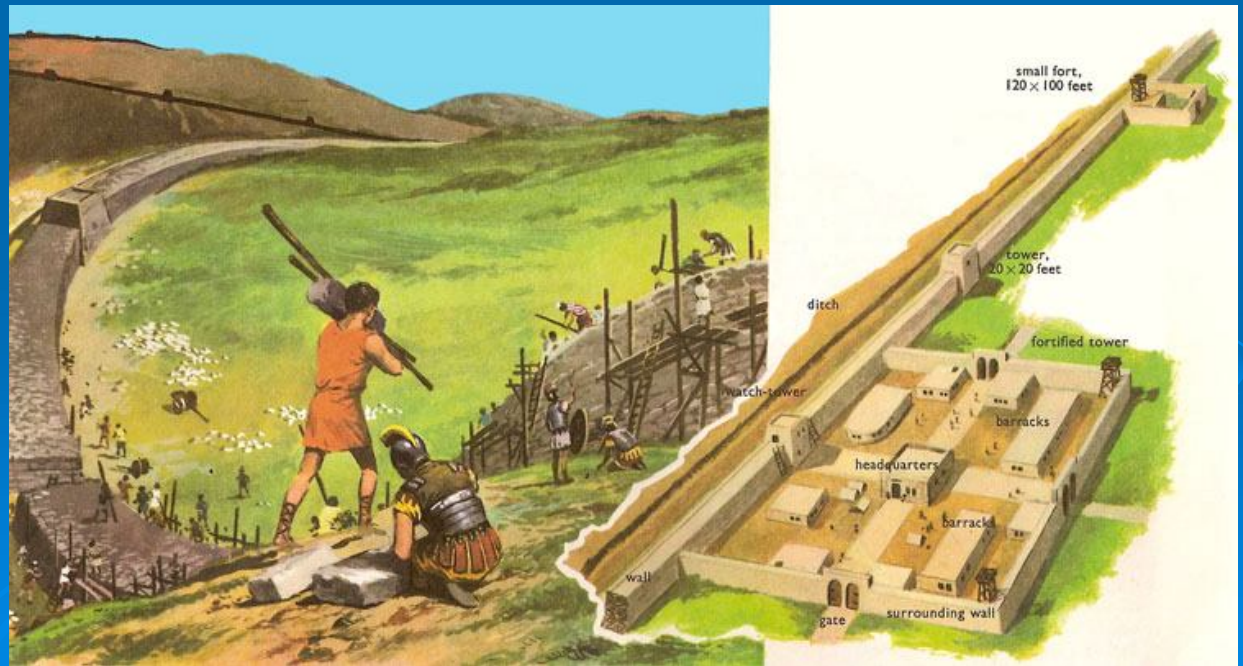
PLUS 6 foot high parapets above that



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31. Hadrian's wall was as much of a _____ barrier as a physical barrier.

Psychological



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32. How many years did it take to build Hadrian's wall?

5 years



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33. What was Hadrian's most famous structure?

The Pantheon



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34. What was at the heart of the structure's design?

The Rotunda



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35. The pantheon's dome would remain the largest unsupported concrete span in the world for _____ centuries.

18 centuries (1800 years)

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36. What is the one mysterious flaw of the Pantheon?

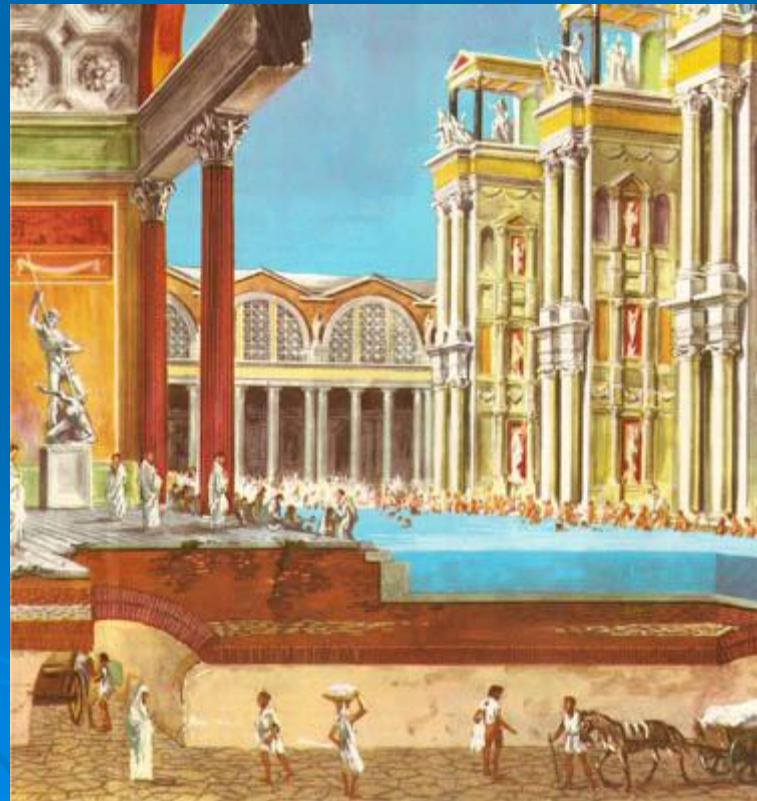
The front portico where the columns are is ten feet too short

The height of the columns (40 feet instead of 50 feet) may have been an issue

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37. How many people could Caracalla's massive bath complex accommodate at any one time?

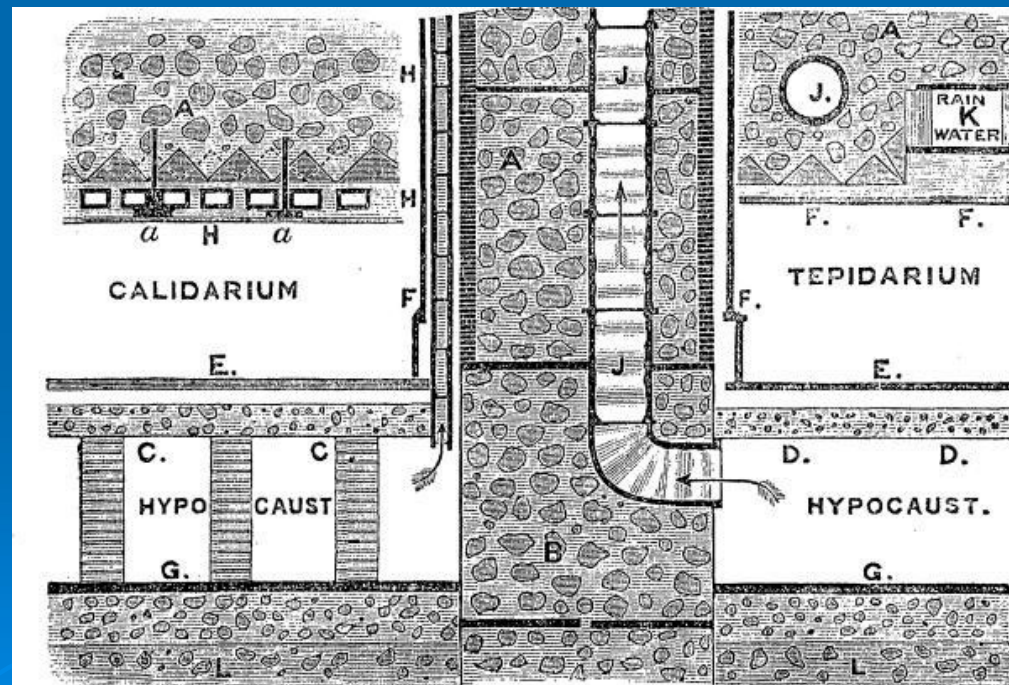
Nearly 2000
Romans at one time



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38. How many furnaces supported Caracalla's bath complex?

50 furnaces



Method of heating the Baths in the Thermae of Caracalla. (From Middleton.)

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39. What Roman structure was gutted by a devastating fire in 217 A.D.?

The Coliseum

