

Roman Architecture



Arches



- The Romans used arches to support the things they built.
- They built victory arches, buildings and aqueducts.

Aqueducts



Aqueducts-

a way to carry water

- There wasn't enough water in the city of Rome.
- The Romans brought water in from the surrounding countryside.
- The water was brought in by tubes called aqueducts.

Why arches?



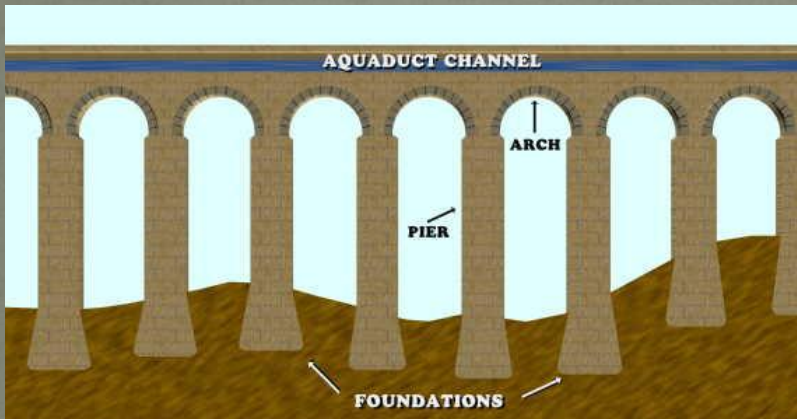
- Water is heavy stuff.
- The Romans needed a structure strong enough to hold all that water to move it from the mountains into the city.

Where did the water go?



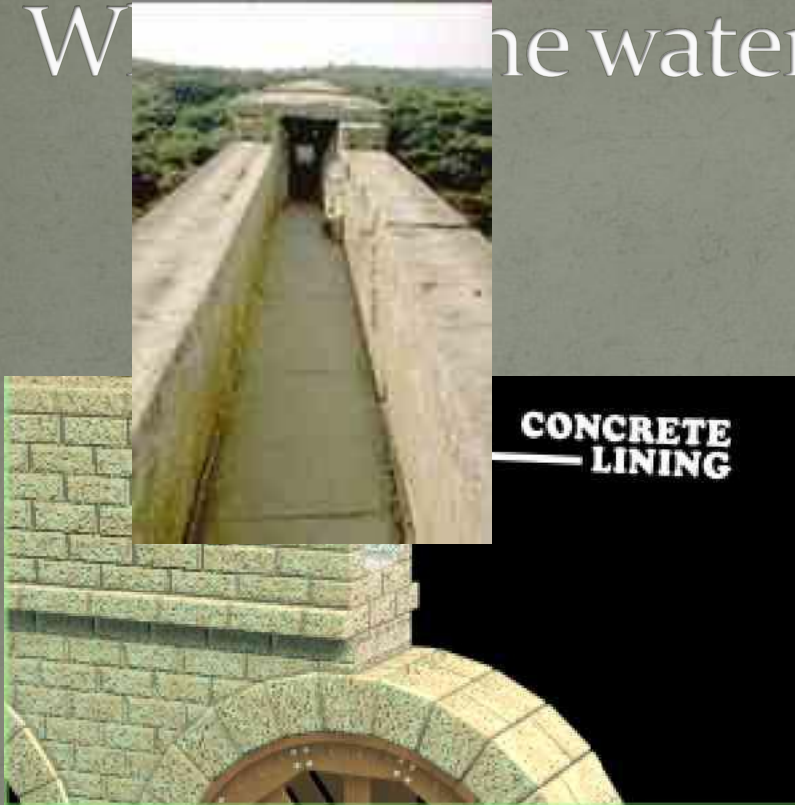
- The water was transported in concrete tunnels.
- The tunnels were underground if possible.
- Sometimes the tunnel had to go above ground.

How did the aqueduct work?



- The water flowed in a tube on the top of the aqueduct called a water channel.
- The arches supported the water channel.

What does the water channel look like?



- The water flowed through a rectangular channel.
- The channel was lined with concrete.
- The Romans invented concrete.

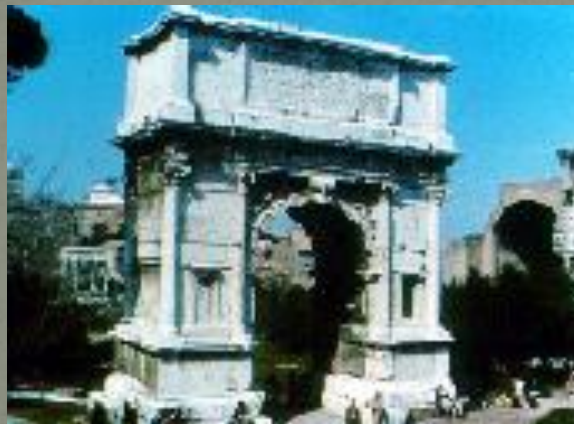
Where else did the Romans use arches?

- Arches of Triumph

- Buildings

- Roofs

Arches of Triumph- to celebrate military success



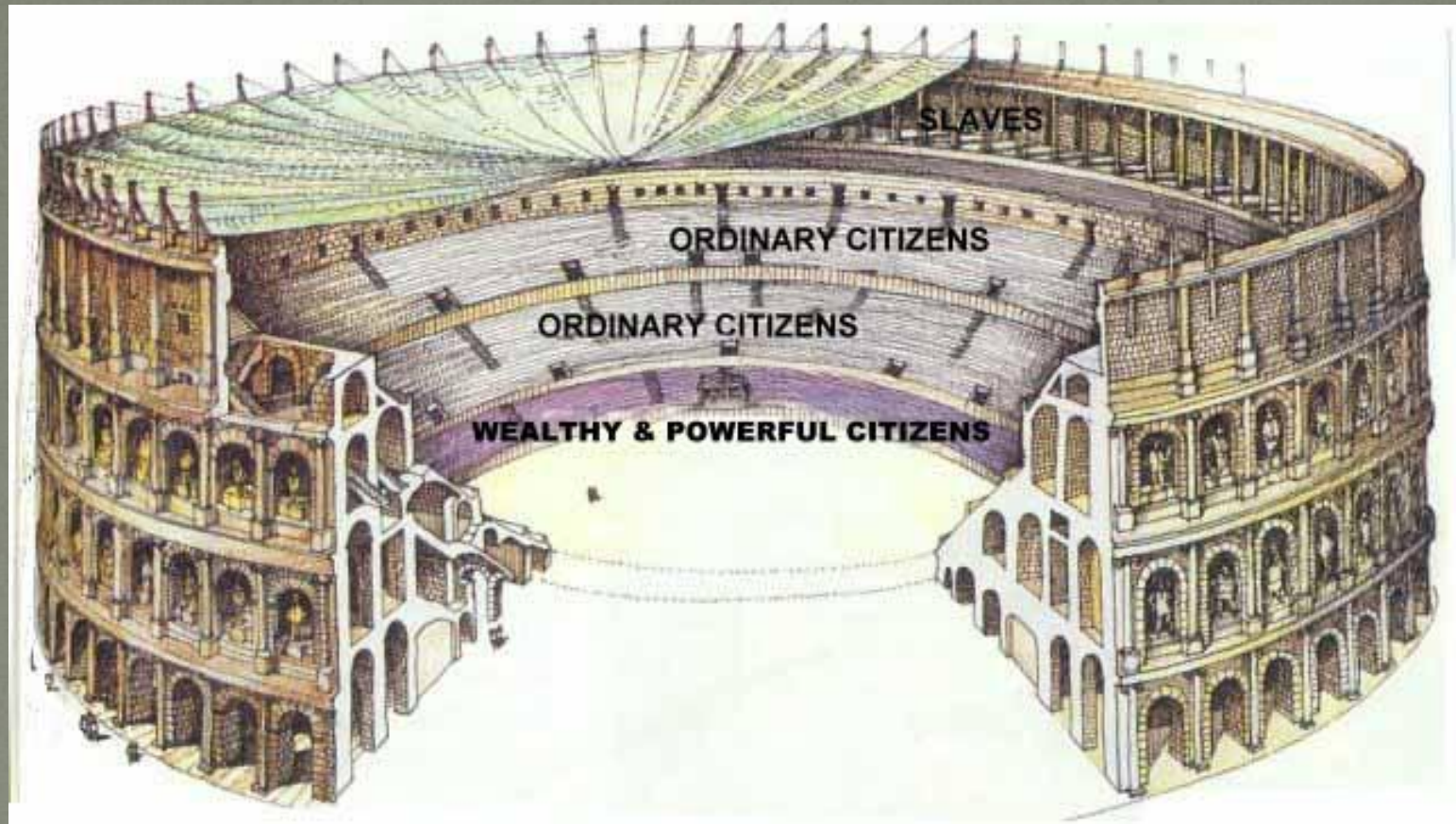
The Coliseum- a place for sports



The Coliseum- a blend of Greek and Roman architecture

- The arches are supported by central columns.
- The columns on the first floor are Doric.
- The columns on the second floor are Ionic.
- The columns on the third floor are Corinthian.



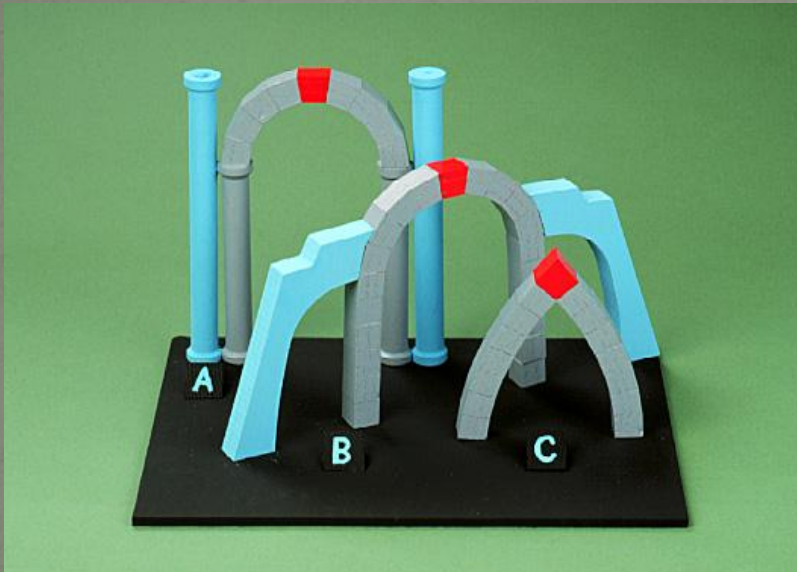


The Pantheon- a temple to all the gods



How does an arch work?

Keystones



- The keystone is the red stone at the top of the arch.
- The keystone is what the weight rests on.

How does an arch work?

Voussoirs



- The semi-circular stones on either side of the keystone are the voussoirs.
- The voussoirs bring the weight to the columns that go to the ground.

How does an arch work?

Buttressing



- The square or rectangular blocks between each arch are buttresses.
- The buttresses make a column that takes the weight all the way to the ground.

Modern arches

