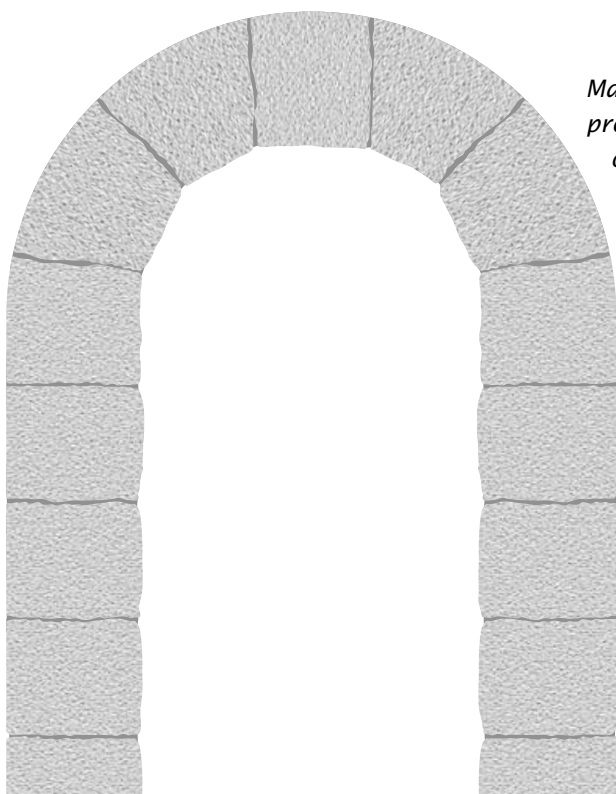


Discovery Worksheets

Build with Roman arches

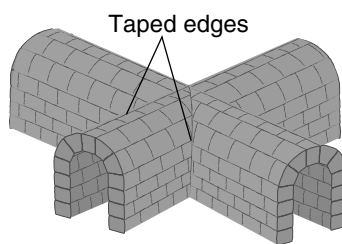
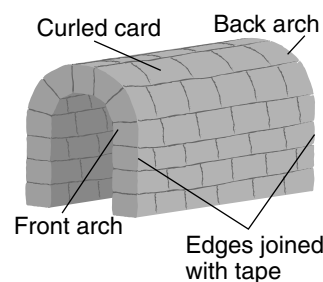
One of the most common features of Roman structures was the arch. It was the basic shape used in aqueducts, vaults, doorways and domed roofs. It is also used in more modern structures. A familiar arched structure is the Arc de Triomphe in Paris, shown on the right. It was built to honour the military victories of the famous French emperor Napoleon Bonaparte. It is the largest triumphal arch in the world.

Photocopy the arch shape below and paste it onto cardboard (as many times as you need to). Then construct one of the suggested ancient Roman structures. Before you start, colour all building pieces attractively in a stone or brick colour.



Tunnel vault

Make this on your own. Cut and prepare two arches. Cut a piece of card 25.5 cm long by 6 cm deep. Colour it with 'bricks'. Curl it into a 'U' shape and tape it to the two arches. Its long edge joins the outer curved edge of each arch.

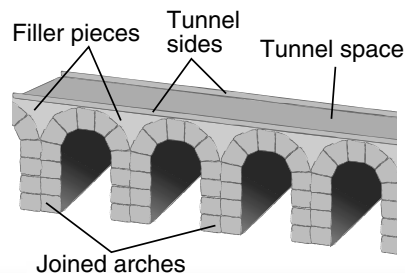


Cross vault

Make this with a partner. Make three tunnel vaults — one 22 cm long (i.e. the rectangular piece will be 25.5 cm × 22 cm) and two 12 cm long (i.e. the rectangular piece will be 25.5 cm × 12 cm). Colour them with 'bricks'. Carefully cut away one end of the two shorter vaults and tape each to the longer vault as shown. Once secure, turn upside down and carefully cut away an opening in the longer vault where it joins each shorter vault.

Aqueduct

Make this in small groups. Each person makes a tunnel vault, as instructed above. Attach tunnel vaults side by side. Insert filler pieces of card between them as shown. Glue a flat piece of card, 6 cm wide by however long your arches are, along the top. When this is dry, glue a tunnel shape along the top (the same length and width as the piece of card just cut, with 2 cm high sides attached).



Atlas of Discovery, pp. 36–37, 138–139;
cardboard, glue, scissors, ruler;
coloured pencils or paints