

D&T - Year 3/4 - Spring - Cycle A Construction - Arnolds

What do I already know?

- how to build simple structures, exploring how they can be made stronger, stiffer and more stable
- use safe ways of cutting materials
- select from, use and talk about a wide range of materials and components, according to their characteristics.

I will know how to design and make a Roman shield inspired by Arnolds by:

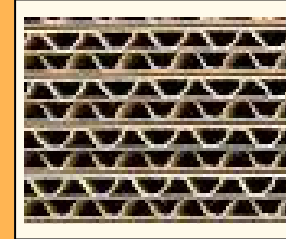
- measuring, marking out, cutting and shaping a range of materials, using appropriate tools, equipment and techniques.
- independently using safe ways of cutting materials including a junior hacksaw.
- applying my understanding of how to strengthen, stiffen and reinforce more complex structures (joining, folding, layering/corrugated, shape and own ideas).
- starting to consider how materials have both functional properties and aesthetic qualities, and choose the most appropriate material for the project.

Aesthetic



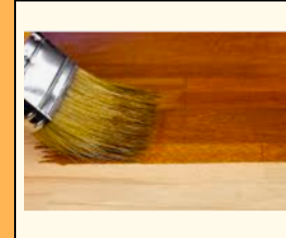
how the product looks, its pleasing qualities.

Corrugated



to shape or bend into parallel, wavelike ridges and grooves.

Finishing



techniques used on a product to help them achieve a high quality finish.

Functional



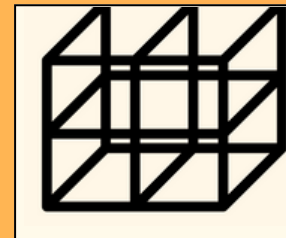
the way something works or how useful it is.

Materials



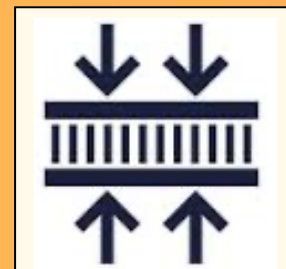
any substance that an object is made from.

Reinforce



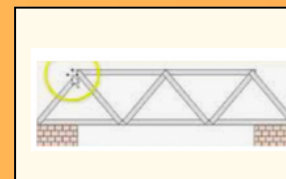
to strengthen by additional assistance, material, or support.

Stiffen

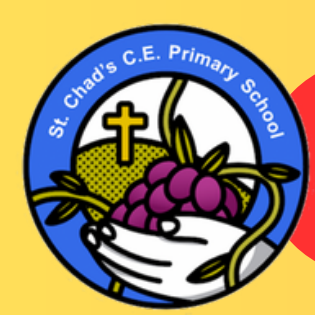


to make firmer and difficult to bend.

Strengthen



to make materials stronger

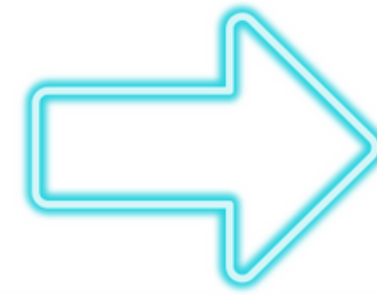


Art - Year 3/4 - Spring - Cycle A Construction - Arnolds

Roman Shields

The most famous Roman Shield is the Legionnaire Scutum.

The shields were mostly made of wood - a few layers glued together to make the curved shape. Some extra strips of wood were glued on the back for more strength. Designs were usually painted onto the front. The shield could also be used in a special formation called a testudo (tortoise). The soldiers formed a complete shell to cover themselves.



- Research your artist/s
- Explore new skills
- Design
- Create
- Evaluate

Our brief: Roman Shield

Your task: Design and make a shield to keep a Roman soldier (you) safe in battle.

Test it: On the playground test out your shields.

Are they fit for purpose?

Recreate a testudo (tortoise). Your teachers are the enemy and are going to be throwing sticks of cardboard (instead of arrows!).

Do any get through?

Have you protected yourselves?

Arnolds

Since 1977, Arnolds made shields designed by and for the Metropolitan Police - the first shields ever to be used in the UK.

Made from transparent polycarbonate - a strong and light weight material.

The shape is inspired by that used by the Roman Shields to prove full coverage for the police.

